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ABSTRACT

The coding system used to classify items in the Instructional Program Planning and Evaluation System (IPPES) Master Objectives Bank is explained. Objectives for 67 topics in mathematics are organized by grade level for each of the grades from kindergarten through six, and their code numbers are specified. (For a listing of objectives by topic, see SE 016 295.) This work was prepared under an ESEA Title III contract. (DT)

ED 077736

I.P.P.E.S. MASTER OBJECTIVES MA

MATHEMATICS (K-6) CATAL EM

JACKSON PUBLIC SCHOOLS
INSTRUCTIONAL PROGRAM
PLANNING & EVALUATION SYSTEM
290 WEST MICHIGAN AVENUE
JACKSON, MICHIGAN 49201

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Funded under Title III, ESEA of 1965,
Michigan Department of Education Project Number 0621

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MASTER OBJECTIVES BANK

EMATICS (K-6) CATALOG

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ESEA TITLE III

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ITEM CODE NUMBERS

Each item of the I.P.P.E.S. Master Objectives Bank is coded with a ten digit numeral. user to categorize a given objective or to locate a needed objective according to a number of

1. Subject matter major classification. Initially IPPES will provide objectives in fi and grammar, (c) science, (d) social studies, and (e) writing skills and written ex left to right) indicate subject matter:

   (a) 00XXXXXXXX = mathematics

   (b) 01XXXXXXXX = reading

   (c) 02XXXXXXXX = science

   (d) 03XXXXXXXX = social studies

   (e) 04XXXXXXXX = writing

2. Grade Level. The grade level at which an objective is normally or traditionally in into the third and fourth digits of the code number. The first issue of the catalo through grade six according to the following code:

   (a) XX00XXXXXX = kindergarten

   (b) XX01XXXXXX = first grade

   (c) XX02XXXXXX = second grade

   (d) XX03XXXXXX = third grade

   (e) XX04XXXXXX = fourth grade

   (f) XX05XXXXXX = fifth grade

   (g) XX06XXXXXX - sixth grade

3. Topic of Instructional Unit: The fifth, sixth, and seventh digits indicate the topi the objective. Each subject matter major classification may be divided into one thc The three digit numerals assigned to topics specific to this catalog are found on th the body of the catalog all objectives associated with a topic are grouped within gr and are associated with a seven digit number.

ITEM CODE NUMBERS

:tives Bank is coded with a ten digit numeral. The system chosen makes it easy for any te a needed objective according to a number of factors:

Initially IPPES will provide objectives in five areas: (a) mathematics, (b) reading studies, and (e) writing skills and written expression. The first two digits (from er:

ics

tudies

h an objective is normally or traditionally introduced into the curriculum is coded he code number. The first issue of the catalogs covers the grade span from kindergarten llowing code:

ten

de

rade

de

rade

de

de

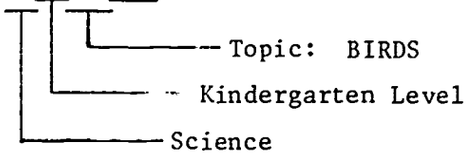
th, sixth, and seventh digits indicate the topic of the instructional unit covered by ajor classification may be divided into one thousand topics within each grade level. topics specific to this catalog are found on the following Topic Summary Sheet. Within s associated with a topic are grouped within grade levels. Topic headings are given number.

4. Objective Within Topic. A maximum of one thousand objectives may be grouped under [illegible] of on[illegible] eighth, ninth, and tenth digits of the code number indicate the objective within th[illegible]he c[illegible]

SPECIFIC EXAMPLES OF CODING

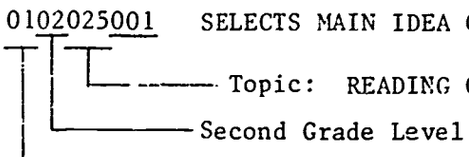
1. Science

0200060007 KNOW THE PARTS OF A CHICKEN EGG. (Seventh objective within topic) [illegible]CKEN



2. Reading

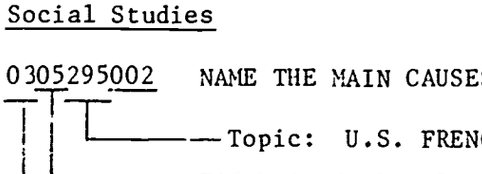
0102025001 SELECTS MAIN IDEA OF A PARAGRAPH. (First objective within topic) [illegible]PARA



[illegible]REHEN

3. Social Studies

0305295002 NAME THE MAIN CAUSES OF THE FRENCH AND INDIAN WAR. (Second objective w[illegible] THE



[illegible]ND I

of one thousand objectives may be grouped under one Instructional Unit Topic. The
he code number indicate the objective within the topic.

SPECIFIC EXAMPLES OF CODING

CKEN EGG. (Seventh objective within topic)

PARAGRAPH. (First objective within topic)

REHENSION

THE FRENCH AND INDIAN WAR. (Second objective within topic)

ND INDIAN WAR.

MATHEMATICS TOPIC SUMMARY SHEET
Grades K-6

CODE	TOPIC	CODE
000	Absolute Value	170
005	Addition	175
010	Addition (Word Problems)	180
015	Bases	185
020	Clock (Module) Arithmetic	190
025	Decimals	195
030	Division	200
035	Estimation	205
040	Exponential Notation	210
045	Fractions	215
050	Geometry (Coordinate Systems)	220
055	Geometry (plane figures) - angles -	225
060	Geometry (plane figures) - circle -	230
065	Geometry (plane figures) - congruence -	235
070	Geometry (plane figures) - constructions -	240
075	Geometry (plane figures) - ellipse -	245
080	Geometry (plane figures) - lines -	250
085	Geometry (plane figures) - open/closed figures -	255
090	Geometry (plane figures) - polygons -	260
095	Geometry (plane figures) - quadrilaterals -	265
100	Geometry (plane figures) - sets of points -	270
105	Geometry (plane figures) - similarity -	275
110	Geometry (plane figures) - sumbols and notation -	280
115	Geometry (plane figures) - symmetry -	285
120	Geometry (plane figures) - terminology -	290
125	Geometry (plane figures) - triangle -	295
130	Geometry (Size and Shape)	300
135	Geometry (Solids)	305
140	Geometry (Space Relationships)	310
145	Graphs	315
150	Inverse (Additive)	320
155	Inverse (Multiplicative)	325
160	Mathematical Systems (Finite and Nonfinite)	330
165	Measurement (Area)	

MATHEMATICS TOPIC SUMMARY SHEET
Grades K-6

CODE	TOPIC
170	Measurement (Dry)
175	Measurement (Instruments)
180	Measurement (Linear)
185	Measurement (Liquid)
190	Measurement (Precision)
195	Measurement (Rate)
200	Measurement (Relative)
205	Measurement (Temperature)
210	Measurement (Time)
215	Measurement (Volume)
220	Multiplication
225	Number Sentences
230	Number Systems (Early)
235	Numbers (Integers)
240	Numbers (Prime - Composite)
245	Numbers (Rational and Irrational)
250	Numbers (whole)
255	Numerals
260	Patterns
265	Percentage
270	Place Value
275	Probability
280	Proportion
285	Ratio
290	Scientific Notation
295	Sets
300	Simplest Terms
305	Square Root
310	Statistics
315	Subtraction
320	Subtraction (Word Problems)
325	Value of Coins
330	Word Problem Solution Strategies

es -
ie -
uence -
ructions -
se -
-
closed figures -
ons -
ilaterals -
of points -
arity -
ols and notation -
etry -
nology -
ngle -

l Nonfinite)

0000005	ADDITION	
0000005001	USING A PICTURE OF TWO SETS OF OBJECTS ADD TWO NUMBERS	WHERE THE S OF
0000005002	USING A NUMBER LINE, ADD TWO NUMBERS WHERE THE SUM IS 10 OR LESS.	WO N
0000005003	ADD TWO 1 DIGIT NUMBERS.	
0000005004	ADD TWO 1 DIGIT NUMBERS VERTICALLY AND/OR HORIZONTALLY	WHERE THE RTIC
0000060	GEOMETRY	
0000060001	GIVEN A MODEL OF A CIRCLE, IDENTIFY AND NAME THIS	GEOMETRIC IDF
0000095001	GIVEN A MODEL OF A SQUARE, IDENTIFY AND NAME THIS	GEOMETRIC IDF
0000095002	GIVEN A MODEL OF A RECTANGLE, IDENTIFY AND NAME THIS	GEOMETRIC LE,
0000125001	GIVEN A MODEL OF A TRIANGLE, IDENTIFY AND NAME THIS	GEOMETRIC E, I
0000135001	GIVEN SET OF SOLID SHAPES (CONES, PYRAMIDS) NAME AND	SORT THEM CON
0000135002	GIVEN A SET OF SOLID SHAPES OF CUBES, SPHERES, AND CATEGORIES.	CYLINDERS S OF
0000140001	USE THE TERMS INSIDE, OUTSIDE, AND ON AS RELATED TO	SOLID FIG IDE,
0000140002	INDICATE WHEN A GIVEN OBJECT IS BELOW, BESIDE AND	BETWEEN I CT I

S OF OBJECTS ADD TWO NUMBERS WHERE THE SUM IS 10 OR LESS.

O NUMBERS WHERE THE SUM IS 10 OR LESS.

RTICALLY AND/OR HORIZONTALLY WHERE THE SUM IS 10 OR LESS.

IDENTIFY AND NAME THIS GEOMETRIC FIGURE.

IDENTIFY AND NAME THIS GEOMETRIC FIGURE.

LE, IDENTIFY AND NAME THIS GEOMETRIC FIGURE.

E, IDENTIFY AND NAME THIS GEOMETRIC FIGURE.

(CONES, PYRAMIDS) NAME AND SORT THEM ACCORDING TO THEIR CATEGORIES.

S OF CUBES, SPHERES, AND CYLINDERS, NAME AND SORT THEM ACCORDING TO THEIR

IDE, AND ON AS RELATED TO SOLID FIGURES.

CT IS BELOW, BESIDE AND BETWEEN IN RELATIONSHIP TO ONE OR MORE OTHER OBJECTS.

0000175	MEASUREMENT	
0000175001	DEFINE CALENDAR.	
0000175002	DEFINE CLOCK.	
0000175003	DEFINE THERMOMETER.	
0000180001	DEFINE RULER.	
0000200001	USE APPROPRIATELY SUCH WORDS AS LONGER, SHORTER,	HEAVIER, LIGH
0000210001	TELL THE NAME OF THE MONTH AND THE DAY OF THE WEEK.	
0000210002	MAKE COMPARISONS IN TIME AND COUNT WHOLE UNITS OF TIME	(DAY, WEEK, MO
0000255	NUMERALS	
0000255001	KNOW THAT A NUMBER IS AN IDEA.	
0000255002	GIVEN SETS OF ELEMENTS (PICTURE OR CONCRETE) SOME OF AND IDENTIFY NUMERAL 0 AS REPRESENTING THE NUMBER OF THE	WHICH ARE EMPT SET.
0000255003	GIVEN SETS OF ELEMENTS (PICTURES OR CONCRETE) SOME OF CONTAIN ONE MEMBER EACH AND IDENTIFY NUMERAL 1 AS	WHICH HAVE CAR REPRESENTING T
0000255004	GIVEN SETS OF ELEMENTS (PICTURES OR CONCRETE) SOME OF WHICH CONTAIN TWO MEMBERS EACH AND IDENTIFY THE NUMERAL	WHICH HAVE THE 2 AS REPRESENT
0000255005	GIVEN SETS OF ELEMENTS (PICTURES OR CONCRETE) SOME OF WHICH CONTAIN THREE MEMBERS EACH AND IDENTIFY NUMERAL	WHICH HAVE THE 3 AS REPRESENT
0000255006	GIVEN SETS OF ELEMENTS (PICTURES OR CONCRETE) SOME OF WHICH CONTAIN FOUR MEMBERS EACH AND IDENTIFY NUMERAL 4	WHICH HAVE THE AS REPRESENTIN

LONGER, SHORTER,	HEAVIER, LIGHTER, LOWER, LARGER, SMALLER.
THE DAY OF THE WEEK.	
UNT WHOLE UNITS OF TIME	(DAY, WEEK, MONTH, YEAR).
OR CONCRETE) SOME OF SENTING THE NUMBER OF THE	WHICH ARE EMPTY SETS, LOCATE THE SETS WHICH ARE EMPTY SET.
S OR CONCRETE) SOME OF NTIFY NUMERAL 1 AS	WHICH HAVE CARDINAL NUMBER OF ONE, LOCATE THE SETS WHICH REPRESENTING THE MEMBER.
S OR CONCRETE) SOME OF AND IDENTIFY THE NUMERAL	WHICH HAVE THE CARDINAL NUMBER OF TWO. LOCATE THE SETS 2 AS REPRESENTING THE NUMBER OF THE SET.
S OR CONCRETE) SOME OF H AND IDENTIFY NUMERAL	WHICH HAVE THE CARDINAL NUMBER OF THREE, LOCATE THE SETS 3 AS REPRESENTING THE NUMBER OF THE SET.
S OR CONCRETE) SOME OF AND IDENTIFY NUMERAL 4	WHICH HAVE THE CARDINAL NUMBER OF FOUR, LOCATE THE SETS AS REPRESENTING THE NUMBER OF THE SETS.

0000255007	GIVEN SETS OF ELEMENTS (PICTURE OR CONCRETE) SOME OF WHICH CONTAINS FIVE MEMBERS EACH AND IDENTIFY NUMERAL 5	WHICH HA TURE AS REPRE EAC
0000255008	GIVEN SETS OF ELEMENTS (PICTURES OR CONCRETE) SOME OF WHICH CONTAIN SIX MEMBERS EACH AND IDENTIFY NUMERAL 6	WHICH HA TURE AS REPRE ACH
0000255009	GIVEN SETS OF ELEMENTS (PICTURES OR CONCRETE) SOME OF WHICH CONTAIN SEVEN MEMBERS EACH AND IDENTIFY NUMERAL 7	WHICH HA TURE AS REPRE EAC
0000255010	GIVEN SETS OF ELEMENTS (PICTURES OR CONCRETE) SOME OF WHICH CONTAIN EIGHT MEMBERS EACH AND IDENTIFY NUMERAL 8	WHICH HA TURE AS REPRE EAC
0000255011	GIVEN SETS OF ELEMENTS (PICTURES OR CONCRETE) SOME OF WHICH CONTAIN NINE MEMBERS EACH AND IDENTIFY NUMERAL 9	WHICH HA TURE AS REPRE EAC
0000255012	GIVEN SETS OF ELEMENTS (PICTURES OR CONCRETE) SOME OF WHICH CONTAIN TEN MEMBERS EACH AND IDENTIFY NUMERAL 10	WHICH HA TURE AS REPRE ACH
0000255013	IDENTIFY THE NUMERALS 0 THROUGH 9.	OUGH
0000255014	GIVEN A GROUP OF NO MORE THAN 10 OBJECTS, COUNT THE	OBJECTS. AN
0000255015	GIVEN A POINT ON A NUMBER LINE, WRITE THE CORRESPONDING	NUMBER FR INE
0000255016	GIVEN A SET OF NUMERAL FLASH CARDS, 0 THROUGH 10,	ARRANGE H C
0000255017	PROVIDED WITH PROPER MATERIALS, SUCH AS, PENCIL, PAPER,	OR CHALK ALS
0000255018	MATCH THE WORD FORMS OF THE NUMBERS 0-10 WITH THE	CORRECT N NU
0000255019	COUNT ORALLY BY MATCHING NUMERALS WITH SETS HAVING A	GIVEN NUM MER
0000255020	SELECT THE SET OF OBJECTS ASSOCIATED WITH A GIVEN	NUMBER. SSO

TURE OR CONCRETE; SOME OF EACH AND IDENTIFY NUMERAL 5	WHICH HAVE THE CARDINAL NUMBER OF FIVE, LOCATE THE SET AS REPRESENTING THE NUMBER OF THE SET.
TURES OR CONCRETE) SOME OF ACH AND IDENTIFY NUMERAL 6	WHICH HAVE THE CARDINAL NUMBER OF SIX, LOCATE THE SETS AS REPRESENTING THE NUMBER OF THE SET.
TURES OR CONCRETE) SOME OF EACH AND IDENTIFY NUMERAL 7	WHICH HAVE THE CARDINAL NUMBER OF SEVEN, LOCATE THE SET AS REPRESENTING THE NUMBER OF THE SET.
TURES OR CONCRETE) SOME OF EACH AND IDENTIFY NUMERAL 8	WHICH HAVE THE CARDINAL NUMBER OF EIGHT, LOCATE THE SET AS REPRESENTING THE NUMBER OF THE SET.
TURES OR CONCRETE) SOME OF EACH AND IDENTIFY NUMERAL 9	WHICH HAVE THE CARDINAL NUMBER OF NINE LOCATE THE SETS AS REPRESENTING THE NUMBER OF THE SET.
TURES OR CONCRETE) SOME OF ACH AND IDENTIFY NUMERAL 10	WHICH HAVE THE CARDINAL NUMBER OF TEN, LOCATE THE SETS AS REPRESENTING THE NUMBER OF THE SET.
OUGH 9.	
AN 10 OBJECTS, COUNT THE	OBJECTS.
INE, WRITE THE CORRESPONDING	NUMBER FROM 0-10 FOR THE POINT.
H CARDS, 0 THROUGH 10,	ARRANGE THEM IN THE CORRECT SEQUENCE.
ALS, SUCH AS, PENCIL, PAPER,	OR CHALK, CORRECTLY WRITE THE NUMERALS 0 THROUGH 10.
NUMBERS 0-10 WITH THE	CORRECT NUMERALS.
MERALS WITH SETS HAVING A	GIVEN NUMBER OF OBJECTS.
SSOCIATED WITH A GIVEN	NUMBER.

0000255021 WRITE THE NUMERAL FOR A GIVEN SET OF 0-10 OBJECTS. SET

0000255022 COUNT MEMBERS OF SETS IN THEIR PROPER ORDER THROUGH 10. PRO

0000255023 GIVEN TEN NON-EQUIVALENT SETS, ARRANGE THE SETS IN ORDER. ARR

0000255024 GIVEN GROUPS OF OBJECTS (NO MORE THAN 10) ORGANIZE FROM LARGEST TO SM RE T

0000255025 GIVEN TWO NUMBERS (VERBAL OR SETS OF OBJECTS OR PICTURES) SUC ETS
SAYING SEVEN IS GREATER THAN THREE OR THREE IS LESS THAN SEVEN. THRE

0000255026 GIVEN A SEQUENCE OF OBJECTS, PEOPLE, ETC, IDENTIFY THE ORDINAL NUMBE OPL

0000255027 IN RANDOM ORDER, SHOW WHICH OBJECT IS FIRST TO FIFTH IN A GIVEN SE ECT

0000255028 COUNT OBJECTS FROM 0-100 ORALLY. .

0000255029 COUNT ORALLY BY STEPS TO 100.

0000260 PATTERNS

0000260001 COPY A GIVEN PATTERN OF OBJECTS OR SHAPES. S OR

0000260002 GIVEN A SERIES OF OBJECTS OR SHAPES IN A PATTERN, DESCRIBE THE HAPE

0000260003 GIVEN A SIMPLE PATTERN, SUCH AS A TRIANGLE, A SQUARE, AND A TRIANGL S A

0000260004 AFTER SEEING A GIVEN PATTERN OF OBJECTS THAT HAS NO MORE THAN THREE PA OB
OF OBJECTS.

SET OF 0-10 OBJECTS.

PROPER ORDER THROUGH 10.

ARRANGE THE SETS IN ORDER.

RE THAN 10) ORGANIZE FROM LARGEST TO SMALLEST AND SMALLEST TO LARGEST.

TS OF OBJECTS OR PICTURES) SUCH AS SEVEN AND THREE, ORDER THEM BY
THREE OR THREE IS LESS THAN SEVEN.

OPLE, ETC. IDENTIFY THE ORDINAL NUMBER IN THE SEQUENCE.

ECT IS FIRST TO FIFTH IN A GIVEN SET OF OBJECTS ARRANGED IN A ROW.

.

S OR SHAPES.

HAPES IN A PATTERN, DESCRIBE THE NEXT STEP OF THE PATTERN.

A TRIANGLE, A SQUARE, AND A TRIANGLE, EXTEND THE PATTERN.

CTS THAT HAS NO MORE THAN THREE PARTS, REPRODUCE FROM MEMORY THE SAME PATTERN

0000270	PLACE VALUE
0000270001	RECOGNIZE THE NUMBER OF TENS AND THE NUMBER OF ONES IN A GIVEN 2
0000295	SETS
0000295001	KNOW THAT A SET IS AN AGGREGATE, GROUP OR COLLECTION OF OBJECTS
0000295002	KNOW THAT A SET MAY BE IDENTIFIED EITHER BY LISTING OR DESCRIBIN
0000295003	GIVEN A GROUP OF OBJECTS WITH ONE OBJECT DIFFERENT FROM THE REST,
0000295004	RECOGNIZE THE SMALLEST OR LARGEST OBJECT IN A GROUP OF OBJECTS.
0000295005	GIVEN A GROUP OF OBJECTS, RECOGNIZE THOSE THAT ARE THE SAME SIZE ARE THE SAME COLOR.
0000295006	GIVEN A SET OF OBJECTS, COMPARE THEM AND IDENTIFY AND NAME THE
0000295007	RECOGNIZE THE SIMILARITIES OF GIVEN OBJECTS: SIZE, WEIGHT, P
0000295008	GIVEN AN OBJECT, IDENTIFY ITS POSITION IN RELATION TO ANOTHER O MARK PICTURES ACCORDING TO DIRECTIONS GIVEN BY THE TEACHER.
0000295009	GIVEN SETS OF PICTURES DEPICTING DIFFERENCES IN SIZE AS LONGER, S PICTURE ACCORDING TO DIRECTIONS GIVEN BY THE TEACHER.
0000295010	GIVEN A VERBAL DESCRIPTION OF A SET, DISTINGUISH BETWEEN MEMBERS O
0000295011	THE SET THAT CONTAINS NO MEMBERS IS CALLED THE EMPTY SET.
0000295012	GIVEN PAIRS OF SETS, COMPARE THE SETS BY VISUAL INSPECTIO TO DIRECTIONS GIVEN BY THE TEACHER.

S AND THE NUMBER OF ONES IN A GIVEN 2 DIGIT NUMBER.

GATE, GROUP OR COLLECTION OF OBJECTS OR IDEAS THAT WE WISH TO TREAT TOGETHER.

TIFIED EITHER BY LISTING OR DESCRIBING ITS MEMBERS.

TH ONE OBJECT DIFFERENT FROM THE REST, RECOGNIZE THE OBJECT THAT IS DIFFERENT.

ARGEST OBJECT IN A GROUP OF OBJECTS.

ECOGNIZE THOSE THAT ARE THE SAME SIZE, THOSE THAT ARE THE SAME SHAPE, OR THOSE THAT

PARE THEM AND IDENTIFY AND NAME THE HEAVIEST AND LIGHTEST.

OF GIVEN OBJECTS: SIZE, WEIGHT, POSITION, COLOR, SHAPE, COMPOSITION, USE.

TS POSITION IN RELATION TO ANOTHER OBJECT (IN, ON, OVER, UNDER, BESIDE) AND WILL
DIRECTIONS GIVEN BY THE TEACHER.

CTING DIFFERENCES IN SIZE AS LONGER, SHORTER, TALLER, LARGER, SMALLER, MARK THE
IONS GIVEN BY THE TEACHER.

OF A SET, DISTINGUISH BETWEEN MEMBERS OF THE SET AND THINGS WHICH ARE NOT MEMBERS.

MBERS IS CALLED THE EMPTY SET.

THE SETS BY VISUAL INSPECTION AND FIND THE LARGER OR SMALLER SET ACCORDING
EACHER.

0000295013	USE SUCH TERMS AS MORE THAN, A^ MANY AS, FEWER THAN	WHEN COMPARING MANY
0000295014	TWO SETS THAT CONTAIN THE SAMF MEMBERS ARF SAID TO BE	EQUAL. EMBE
0000295015	GIVEN TWO EQUIVALENT SETS (OBJECTS OR PICTURES) THROUGH	ONE-TO-ONE MAT TS O
0000295016	GIVEN TWO NON-EQUIVALENT SETS (OBJECTS OR PICTURES).	THROUGH ONE-TO BJEC
	EQUIVALENT.	
0000295017	UTILIZE THE IDEA ONE MORE THAN IN ORGANIZING SETS IN	THE NATURAL OR IN
0000295018	IDENTIFY, WITHOUT COUNTING, THE NUMBER OF SETS WITH TWO,	THREE, OR FOUR NUMB
0000295019	COMPARE TWO NON-MATCHING SETS OF FEWER THAN 10 OBJECTS	AND DECIDE WHI FEW
	HAS FEWER MEMBERS.	
0000295020	DETERMINE WHETHER TWO SETS ARE EQUIVALENT (CAN BE	MATCHED OR PLA QUIV
0000295021	IDENTIFY TWO EQUIVALENT SETS BY PLACING THE MEMBERS OF	THE SET IN ONE PLAC
0000295022	DETERMINE THAT 3 IS GREATER THAN 2 AND THAT 2 IS LESS	THAN 3 BY COMP 2 A
	THIS FOR ANY TWO NUMBERS LESS THAN 6.	AN 6
0000295023	REARRANGE SETS OF OBJECTS TO DEMONSTRATE THE JOINING OF	SETS, AND THFR ONST
0000295024	GIVEN TWO SETS, JOIN THE TWO SETS AND GET A THIRD SET.	S AN
0000295025	DEMONSTRATE IF YOU JOIN A SET OF ONE ELEMENT TO A SET	CONTAINING TWO ONE
	SET OF TWO ELEMENTS WITH A SET OF ONE ELEMENT.	F ON
0000295026	GIVEN A SET OF ELEMENTS, REMOVE A SET AND GET A	REMAINING SET. A SE

MANY AS, FEWER THAN — WHEN COMPARING SETS OF OBJECTS.

EMBERS ARE SAID TO BE — EQUAL.

TS OR PICTURES) THROUGH — ONE-TO-ONE MATCHING, IDENTIFY THE SETS AS EQUIVALENT.

BJECTS OR PICTURES) — THROUGH ONE-TO-ONE MATCHING, IDENTIFY THE SETS AS NON-

IN ORGANIZING SETS IN — THE NATURAL ORDER.

NUMBER OF SETS WITH TWO, — THREE, OR FOUR OBJECTS.

FEWER THAN 10 OBJECTS — AND DECIDE WHICH SET HAS MORE MEMBERS AND WHICH SET

QUIVALENT (CAN BE — MATCHED OR PLACED IN A ONE-TO-ONE CORRESPONDENCE).

PLACING THE MEMBERS OF — THE SET IN ONE-TO-ONE CORRESPONDENCE.

2 AND THAT 2 IS LESS — THAN 3 BY COMPARING APPROPRIATE SETS OF OBJECTS AND DO
AN 6.

ONSTRATE THE JOINING OF — SETS, AND THEREBY DEVELOP A READINESS FOR ADDITION.

S AND GET A THIRD SET.

ONE ELEMENT TO A SET — CONTAINING TWO ELEMENTS, IT IS THE SAME AS JOINING A
F ONE ELEMENT.

A SET AND GET A — REMAINING SET.

0000295027	SOLVE SIMPLE ADDITION PROBLEMS WHERE THE SUM OF THE THE ORALLY PROPOSED PROBLEM. COUNTERS MAY BE USED.	PARTS IS
0000295028	GIVEN A SET OF 10 OBJECTS, CONTAINING TWO OR MORE ORALLY.	SUBSETS,
0000295029	GIVEN MORE THAN ONE SUBSET, COMBINE SUBSETS AND ORALLY PRODUCES: TO 10.	INDICATE
0000295030	REARRANGE SETS OF OBJECTS TO DEMONSTRATE THE SEPARATING	OF SETS,
0000295031	SOLVE SIMPLE SUBTRACTION PROBLEMS BY USING COUNTERS INDICATE THE ANSWER TO THE ORALLY PROPOSED PROBLEMS.	WHEN THE
0000315	SUBTRACTION	
0000315001	WITH A PICTURE OF TWO SETS OF OBJECTS, SUBTRACT A 1	DIGIT NU
0000315002	WITH A NUMBER LINE, SUBTRACT A 1 DIGIT NUMBER FROM A	LARGER 1
0000325	VALUE OF COINS	
0000325001	RECOGNIZE PENNIES, NICKELS, DIMES.	
0000325002	IDENTIFY A PENNY, NICKEL, DIME AND TELL THE VALUE OF	EACH.
0000325003	FIND THE VALUE OF A GIVEN GROUP OF PENNIES, NICKELS, AND DIMES TH	

EMS WHERE THE SUM OF THE PARTS IS 5 OR LESS BY ORALLY INDICATING THE ANSWER TO
COUNTERS MAY BE USED.

CONTAINING TWO OR MORE SUBSETS, IDENTIFY THE NUMBER OF SUBSETS WITHIN THE SET

COMBINE SUBSETS AND ORALLY INDICATE HOW MANY THE COMBINATION OF THE SUBSETS

C DEMONSTRATE THE SEPARATING OF SETS, THEREBY DEVELOPING A READINESS FOR SUBTRACTION.

UBLEMS BY USING COUNTERS WHEN THE PARTS OF THE WHOLE EQUAL 5 OR LESS, ORALLY
ORALLY PROPOSED PROBLEMS.

OF OBJECTS, SUBTRACT A 1 DIGIT NUMBER FROM A LARGER 1 DIGIT NUMBER.

T A 1 DIGIT NUMBER FROM A LARGER 1 DIGIT NUMBER.

DIMES.

IMF AND TELL THE VALUE OF EACH.

ROUP OF PENNIES, NICKELS, AND DIMES THAT TOTAL LESS THAN $1.00.

0001005	ADDITION	
0001005001	IDENTIFIES THE ADDITIVE PROPERTY OF 0.	
0001005002	MANIPULATES OBJECTS TO ILLUSTRATE ADDITION FACTS THROUGH 5.	
0001005003	SELECTS OTHER NAMES FOR NUMBERS BY MATCHING ADDITION	EXPRESSIONS W
0001005004	IDENTIFIES CARDINAL NUMBER IN EACH OF TWO SETS TOGETHER	THROUGH 5.
0001005005	STUDENT SUPPLIES THE SYMBOLS FOR PLUS (+), AND EQUAL TO	(=) TO REPLAC
0001005006	IDENTIFIES EQUAL SIGN (=) AND ITS MEANING WHEN USED IN	AN EQUATION.
0001005007	USE THE SYMBOLS +, AND = TO FORM SENTENCES SUCH AS 3 +	6 = 9.
0001005008	SOLVES EQUATIONS OF SUMS TO 5 (FIRST HORIZONTAL; THEN	VERTICAL).
0001005009	MANIPULATES OBJECTS TO ILLUSTRATE ADDITION FACTS 6-9.	
0001005010	SELECTS OTHER NAMES FOR NUMBERS BY MATCHING ADDITION	EXPRESSIONS W
0001005011	IDENTIFIES CARDINAL NUMBER IN EACH OF TWO SETS AND IN	BOTH SETS TOG
0001005012	SOLVES EQUATIONS OF SUMS (6-9); (FIRST HORIZONTAL;	THEN VERTICAL
0001005013	MANIPULATES OBJECTS TO ILLUSTRATE COMBINATIONS OF TEN.	
0001005014	SELECTS OTHER NAMES FOR 10 WITH PICTURE GROUPS OR	NUMERALS.

Y OF 0.

TE ADDITION FACTS THROUGH 5.

S BY MATCHING ADDITION EXPRESSIONS WITH PICTURED GROUPS OF NUMERALS TO 5.

ACH OF TWO SETS TOGETHER THROUGH 5.

R PLUS (+), AND EQUAL TO (=) TO REPLACE THE WORDS IN A NUMBER SENTENCE.

TS MEANING WHEN USED IN AN EQUATION.

M SENTENCES SUCH AS 3 + 6 = 9.

FIRST HORIZONTAL; THEN VERTICAL).

TE ADDITION FACTS 6-9.

S BY MATCHING ADDITION EXPRESSIONS WITH PICTURED GROUPS OR NUMERALS 6-9.

ACH OF TWO SETS AND IN BOTH SETS TOGETHER EQUALING 6-9.

(FIRST HORIZONTAL; THEN VERTICAL).

TE COMBINATIONS OF TEN.

TH PICTURE GROUPS OR NUMERALS.

0001005015	IDENTIFIES CARDINAL NUMBER IN EACH OF TWO SETS AND IN	BOTH SET
0001005016	USE THE ADDITION FACTS THROUGH THE SUM OF 10.	
0001005017	FILLS IN MISSING ADDENDS FROM EQUATIONS WITH SUMS OF 10.	
0001005018	SOLVES EQUATIONS WITH SUM OF 10; (FIRST HORIZONTAL;	THEN VER
0001005019	RECOGNIZE EXAMPLES OF THE COMMUTATIVE PROPERTY FOR	ADDITION
0001005020	GIVEN AN ADDITION EQUATION, WRITES OR COMPLETES A FOR ADDITION: TO 10.	SECOND E
0001005021	FILLS IN NUMBERS (MISSING SUMS) TO MAKE TRUE NUMBER	SENTENCES
0001005022	WRITES = SIGN TO IDENTIFY TRUE STATEMENTS. CREATES TRUE NUMBER SE	
0001005023	IDENTIFIES AN UNKNOWN COMBINATION GREATER THAN 10,	USING A K
0001005024	GIVEN NUMBER SENTENCES, SUMS TO 12, STUDENT ILLUSTRATES	ELEMENT (
0001005025	GIVEN ANY NUMBER TO 12, STUDENT NAMES THAT NUMBER IN	ALL POSS
0001005026	STUDENT USES HORIZONTAL AND VERTICAL ALGORISMS TO SOLVE	PROBLEMS
0001005027	GIVEN NUMBER SENTENCES WITH SUMS TO 12, THE STUDENT WILL	ILLUSTRAT
0001005028	IDENTIFIES THE USE OF PARENTHESES IN ADDITION EQUATIONS	CONTAININ

IN EACH OF TWO SETS AND IN	BOTH SETS TOGETHER EQUALING 10.
UGH THE SUM OF 10.	
OM EQUATIONS WITH SUMS OF 10.	
F 10; (FIRST HORIZONTAL;	THEN VERTICAL).
OMMUTATIVE PROPERTY FOR	ADDITION IN THE SET OF WHOLE NUMBERS.
WRITES OR COMPLETES A	SECOND EQUATION TO ILLUSTRATE THE COMMUTATIVE PRINCIPLE
UMS) TO MAKE TRUE NUMBER	SENTENCES FOR PICTURED ADDITION SITUATIONS.
RUE STATEMENTS. CREATES TRUE	NUMBER SENTENCES, CHANGING ONLY ONE NUMBER. SUMS TO 10.
NATION GREATER THAN 10,	USING A KNOWN COMBINATION.
S TO 12, STUDENT ILLUSTRATES	ELEMENT OF IDENTITY 0.
DENT NAMES THAT NUMBER IN	ALL POSSIBLE ADDITION COMBINATIONS.
VERTICAL ALGORISMS TO SOLVE	PROBLEMS OF ADDITION SUMS TO 12.
SUMS TO 12, THE STUDENT WILL	ILLUSTRATE THE COMMUTATIVE PROPERTY.
THESES IN ADDITION EQUATIONS	CONTAINING MORE THAN TWO ADDENDS.

0001005029 IDENTIFIES SUMS OF 3 ADDENDS; (FIRST HORIZONTAL; THEN VERTICAL).

0001005030 SOLVES ONE-STEP WORD PROBLEMS WITH PICTURES: TO 10

0001010 ADDITION (WORD PROBLEMS)

0001010001 SOLVE WORD PROBLEMS IN WHICH TWO 1 DIGIT NUMBERS ARE ADDED AND THE

0001010002 SOLVE WORD PROBLEMS INVOLVING ADDITION OF TWO 2 DIGIT NUMERALS.

0001045 FRACTIONS

0001045001 USES CORRECTLY AND RESPONDS TO USE OF TERMS WHOLE AND ONE-HALF IN

0001045002 STUDENT IDENTIFIES ONE-HALF OF ANY SYMMETRICAL OBJECT.

0001045003 IDENTIFIES ONE-HALF OF A SET OF OBJECTS. LIMIT OF 12.

0001045004 DEMONSTRATE ONE-HALF, ONE-FOURTH, OF A PHYSICAL UNIT.

0001045005 DIVIDES SET OF OBJECTS INTO ONE-HALF, ONE-THIRD, ONE-FOURTH.

0001045006 DIVIDES OBJECTS INTO ONE-HALF, ONE-THIRD, ONE-FOURTH.

0001050 GEOMETRY (COORDINATE SYSTEMS)

(FIRST HORIZONTAL; THEN VERTICAL).

ITH PICTURES: TO 10.

0 1 DIGIT NUMBERS ARE ADDED AND THE SUM IS TEN OR LESS.

DDITION OF TWO 2 DIGIT NUMERALS.

USE OF TERMS WHOLE AND ONE-HALF IN REFERENCE TO SETS OF OBJECTS.

ANY SYMMETRICAL OBJECT.

OBJECTS. LIMIT OF 12.

H, OF A PHYSICAL UNIT.

-HALF, ONE-THIRD, ONE- FOURTH.

ONE-THIRD, ONE-FOURTH.

0001050001	USE THE NUMBER LINE TO ILLUSTRATE ADDITION AND	SUBTRACT LUST
0001060	GEOMETRY (PLANE FIGURES) - CIRCLE -	CI
0001060001	IDENTIFY CIRCLE.	
0001060002	REPRODUCE CIRCLE FROM MEMORY.	ORY.
0001075	GEOMETRY (PLANE FIGURES) - ELIPSE -	EL
0001075001	IDENTIFY ELLIPSE.	
0001095	GEOMETRY (PLANE FIGURES) - QUADRILATERALS -	QU
0001095001	IDENTIFY RECTANGLE.	
0001095002	REPRODUCE RECTANGLE FROM MEMORY.	EMO
0001095003	IDENTIFY SQUARE.	
0001095004	REPRODUCE SQUARE FROM MEMORY.	ORY.
0001125	GEOMETRY (PLANE FIGURES) - TRIANGLE -	TR
0001125001	REPRODUCE TRIANGLE FROM MEMORY.	MOR

LUSTRATE ADDITION AND SUBTRACTION PROBLEMS.

CIRCLE -

DRY.

ELIPSE -

QUADRILATERALS -

EMORY.

DRY.

TRIANGLE -

ERIC

0001130	GEOMETRY (SIZE AND SHAPE)	
0001130001	USE THE TERMS ROUND, FACE, EDGE, CORNER AND SURFACE.	COR
0001130002	OBSERVE DISTINGUISHING FEATURES OF SPHERES, RECTANGULAR PRISMS (BOXES	OF S
0001140	GEOMETRY (SPACE RELATIONSHIPS)	
0001140001	NAME THE SETS OF POINTS INSIDE, ON, OR OUTSIDE A SIMPLE CLOSED CURVE.	ON,
0001140002	RECOGNIZE PHYSICAL REPRESENTATIONS OF POINTS, LINE SEGMENTS, AND	NS (
0001170	MEASUREMENT (DRY)	
0001170001	IDENTIFIES DOZEN AND HALF DOZEN OBJECTS.	OBJ
0001175	MEASUREMENT (INSTRUMENTS)	
0001175001	IDENTIFY VARIOUS INSTRUMENTS OF MEASUREMENT OF TIME, TEMPERATURE, THERMOMETERS, SCALES, RULERS.	MEA
0001180	MEASUREMENT (LINEAR)	
0001180001	USE NON-STANDARD UNITS OF LINEAR MEASURE AND LIQUID MEASURE, SUCH PAPER CUP FOR LIQUID MEASURE.	ME
0001180002	RECOGNIZES USE OF RULER AND YARDSTICK IN INCHES AND FEET.	STI
0001180003	DETERMINE WHICH OF TWO LINE SEGMENTS IS THE LONGER OR THE SHORTER,	ENT

CORNER AND SURFACE.

OF SPHERES, RECTANGULAR PRISMS (BOXES), CYLINDERS, AND OTHER OBJECTS.

ON, OR OUTSIDE A SIMPLE CLOSED CURVE.

NS OF POINTS, LINE SEGMENTS, AND PORTIONS OF A PLANE (FLAT SURFACES).

OBJECTS.

MEASUREMENT OF TIME, TEMPERATURE, WEIGHT, AND LENGTH, SUCH AS CLOCKS,

MEASURE AND LIQUID MEASURE, SUCH AS A PENCIL OR BOOK FOR LENGTH, AND A

STICK IN INCHES AND FEET.

ENTS IS THE LONGER OR THE SHORTER, OR WHETHER THEY ARE THE SAME LENGTH.

0001180004	FINDS THE INCH MEASURE OF A LINE SEGMENT.	LIN
0001185	MEASUREMENT (LIQUID)	
0001185001	DEVELOP AN UNDERSTANDING OF GALLON, HALF-GALLON, AS UNITS OF	GAL
0001185002	MEASURES WITH CUPS, PINTS, QUARTS.	QUAR
0001200	MEASUREMENT (RELATIVE)	
0001200001	USES CONCRETE OBJECTS AND PICTURES TO COMPARE SIZE, HEIGHT,	ICTU
0001210	MEASUREMENT (TIME)	
0001210001	IS ABLE TO READ CALENDAR.	
0001210002	IDENTIFIES NUMBER OF DAYS IN WEEK, MONTH, YEAR.	N WE
0001210003	KNOWS TIME PERIODS - HOUR, DAY, WEEK, MONTH.	DAY,
0001210004	READS NUMERALS TO 12 ON CLOCK FACE ORALLY.	CK F
0001210005	WRITE NUMERALS TO 12 ON CLOCK FACE.	CK F
0001210006	IDENTIFIES AND DEMONSTRATES HOUR AND HALF HOUR.	HOU

LINE SEGMENT.

GALLON, HALF-GALLON, AS UNITS OF LIQUID MEASUREMENT.

QUARTS.

ICTURES TO COMPARE SIZE, HEIGHT, LENGTH, AND SIZE POSITION.

N WEEK, MONTH, YEAR.

DAY, WEEK, MONTH.

CK FACE ORALLY.

CK FACE.

H ND HALF HOUR.

ERIC

0001210007	TELL TIME TO THE NEAREST HALF-HOUR.	HOUR
0001210008	DEMONSTRATE AN UNDERSTANDING OF TELLING TIME BY SETTING QUARTER HOUR.	THE HANDS OF F TE
0001210009	RECOGNIZE THE WRITTEN TIME (HOUR, HALF HOUR, QUARTER FACE.	HOUR AND FIVE UR,
0001225	NUMBER SENTENCES	
0001225001	PLACES GREATER THAN SYMBOL OR LESS THAN SYMBOL BETWEEN STRUCTURED GROUPS TO 9.	TWO NUMBERS T LESS
0001225002	THE STUDENT WILL INSERT THE SYMBOLS FOR LESS THAN AND	GREATER THAN MBOL
0001225003	DEMONSTRATE WITH SETS OF OBJECTS THE RELATIONSHIP 6 = 4 = 2.	BETWEEN SUCH S TS T
0001225004	FIND THE SOLUTION FOR SENTENCES LIKE 3 + 4 = X AND 5	= 2 = X. CES
0001225005	WRITE AN APPROPRIATE MATHEMATICAL SENTENCE LIKE 3 + 4 = PROBLEM SUGGESTS THE OPERATION OF ADDITION.	X FOR A PHYSI CAL OF
0001225006	MAKE UP A PROBLEM SITUATION TO FIT A GIVEN MATHEMATICAL	SENTENCE INVO FIT
0001225007	WRITE AN APPROPRIATE MATHEMATICAL SENTENCE FOR A STORY	PROBLEM WHERE CAL
0001225008	WRITE A NUMBER SENTENCE FOR A GIVEN PICTURED ADDITION	OR SUBTRACTION GIVE
0001225009	MAKE UP PROBLEMS FOR GIVEN MATHEMATICAL SENTENCES USING	SUBTRACTION. HEMA
0001225010	FIND SOLUTIONS FOR SENTENCES LIKE X + Y = 7 IN WHICH	MANY CORRECT S IKE

HOUR.	
F TELLING TIME BY SETTING	THE HANDS OF A CLOCK TO A GIVEN HOUR, HALF HOUR, AND
UR, HALF HOUR, QUARTER	HOUR AND FIVE MINUTES) REPRESENTED ON A GIVEN CLOCK
LESS THAN SYMBOL BETWEEN	TWO NUMBERS TO INDICATE THE GREATER OR LESSER WITHOUT
MBOLS FOR LESS THAN AND	GREATER THAN WHEN COMPARING CARDINAL NUMBERS.
TS THE RELATIONSHIP	BETWEEN SUCH SENTENCES AS 4 + 2 = 6, 6 - 2 = 4, AND
CES LIKE 3 + 4 = X AND 5	- 2 = X.
CAL SENTENCE LIKE 3 + 4 = OF ADDITION.	X FOR A PHYSICAL SITUATION WHERE THE ACTION OF THE
FIT A GIVEN MATHEMATICAL	SENTENCE INVOLVING ADDITION.
CAL SENTENCE FOR A STORY	PROBLEM WHERE ACTION SUGGESTS SUBTRACTION.
GIVEN PICTURED ADDITION	OR SUBTRACTION PROBLEM.
HEMATICAL SENTENCES USING	SUBTRACTION.
K Y = 7 IN WHICH	MANY CORRECT SOLUTIONS ARE POSSIBLE.

0001225011	SELECTS WHICH OF TWO (OR THREE) NUMBERS IS GREATER	(GREATES REF)
0001225012	WRITE NUMBER SENTENCES USING 3 DIGIT NUMERALS AND THE	SYMBOLS G 3
0001230	NUMBER SYSTEMS (EARLY)	
0001230001	EXPLAIN HOW TO WRITE ROMAN NUMERALS BY COMBINING SEVERAL SYMBOLS.	NUME
0001255	NUMERALS	
0001255001	COUNTS OBJECTS ORALLY FROM ONE TO TEN BY POINTING TO	OBJECT A ONE
0001255002	COUNTS ORALLY FROM ONE TO TEN.	EN.
0001255003	PLACES AN X ON THE OBJECT WITH THE SPECIFIED ORDINAL	POSITION TH
0001255004	IDENTIFIES THE CARDINAL NUMBER AND NUMERAL OF STRUCTURED	GROUPS TO BER
0001255005	IDENTIFIES THE CARDINAL NUMBER AND NUMERAL OF STRUCTURED	GROUPS 5- BER
0001255006	PRESENTED WITH NUMBERS 1-9 IN ORDER, READS THEM FROM	LEFT TO R N O
0001255007	WRITES NUMERALS 1 TO 9 FROM LEFT TO RIGHT ON AN ORDERED	SET OF P LEF
0001255008	TELLS WHAT NUMBER COMES BEFORE OR AFTER A GIVEN NUMBER,	OR IN-BE RE
0001255009	SELECTS WHICH OF TWO (OR THREE) NUMERALS IS GREATER OR	LESS THAN EF)

REF) NUMBERS TS GREATER (GREATEST) SMALLER (SMALLEST) FOR NUMBERS TO 100.

G 3 DIGIT NUMERALS AND THE SYMBOLS LESS THAN, =, AND GREATER THAN.

NUMERALS BY COMBINING SEVERAL SYMBOLS.

ONE TO TEN BY POINTING TO OBJECT AND SAYING NUMBER.

EN.

ITH THE SPECIFIED ORDINAL POSITION TO TENTH.

BER AND NUMERAL OF STRUCTURED GROUPS TO 4.

BER AND NUMERAL OF STRUCTURED GROUPS 5-9.

EN ORDER, READS THEM FROM LEFT TO RIGHT.

LEFT TO RIGHT ON AN ORDERED SET OF PICTURES.

ORE OR AFTER A GIVEN NUMBER, OR IN-BETWEEN TWO NUMBERS. (1-9)

E MERALS IS GREATER OR LESS THAN ANOTHER. (1-9)

0001255010	IDENTIFIES THE ORDER OF SETS OF NUMBERS THROUGH 9	RELATING TO CO
0001255011	STUDENT WILL NAME THE CARDINAL NUMBER OF ANY GIVEN SET	THROUGH 12.
0001255012	READ NUMBER WORDS THROUGH TEN.	
0001255013	GIVEN NUMBER WORDS FOR 0-10, MATCHES WORDS WITH NUMBERS.	
0001255014	GIVEN NUMBER WORDS FROM 0-10, MATCHES WORDS WITH	STRUCTURED GRO
0001255015	IDENTIFIES EVEN NUMBERS TO 50. (COUNTING 2,4,6,8,10,	..., 50).
0001255016	WRITES EVEN NUMBERS TO 50. (COUNTING 2,4,6,8,10,...,	50).
0001255017	IDENTIFIES NUMBERS TO 50 BY SKIP-COUNTING (2'S, 3'S,	4'S, 5'S).
0001255018	WRITES ODD NUMBERS TO 50. (COUNTING 1,3,5,7,..., 49).	
0001255019	STUDENT COUNTS BY TWO'S THROUGH 20, BY 5'S TO 50, BY	10'S TO 100.
0001255020	COUNTS ORALLY BY ONES TO 100 IN SHORT SEQUENCES.	
0001255021	WRITES NUMERAL FROM 1-100 IN SEQUENTIAL ORDER TO TOTAL	FOR SMALL BLOC
0001255022	WRITES NUMERAL 1-100 TO REPRESENT TOTAL OF AN ORDERED	SET OF PICTURE
0001255023	IDENTIFIES WHAT NUMBER COMES AFTER A GIVEN NUMBER, OR STRUCTURED GROUPS.	BEFORE ANY GIV

NUMBERS THROUGH 9	RELATING TO CONCEPT OF ONE MORE.
UMBER OF ANY GIVEN SET	THROUGH 12.
CHES WORDS WITH NUMBERS.	
TCHES WORDS WITH	STRUCTURED GROUPS.
(COUNTING 2,4,6,8,10,	..., 50).
NTING 2,4,6,8,10,...,	50).
-COUNTING (2'S, 3'S,	4'S, 5'S).
TING 1,3,5,7,..., 49).	
20, BY 5'S TO 50, BY	10'S TO 100.
SHORT SEQUENCES.	
UENTIAL ORDER TO TOTAL	FOR SMALL BLOCKS OF (NUMBERED) OBJECTS.
T TOTAL OF AN ORDERED	SET OF PICTURES FOR SMALL BLOCKS OF (NUMBERED) OBJECTS.
ER A GIVEN NUMBER, OR	BEFORE ANY GIVEN NUMBER FOR NUMBERS TO 100, WITHIN

0001255024	PRESENTED WITH AN ORDERED ARRANGEMENT OF NUMERALS,	0-100, ARRA
0001255025	IDENTIFIES NUMBER AFTER GIVEN NUMBER OR BEFORE GIVEN	NUMBER VEN
0001255026	SELECTS A STRUCTURED GROUP TO MATCH A GIVEN NUMBER OR	NUMBERS TO
0001255027	STUDENT WRITES NUMBERS TO 150.	150.
0001255028	STUDENT WILL READ NUMERALS TO 150.	TO
0001255029	COUNTS ORALLY TO ONE THOUSAND BY 100'S, BY 10'S, 5'S,	AND 2'S. AND

0001260	PATTERNS	
0001260001	COPY A GIVEN PATTERN OF OBJECTS OR SHAPES.	JECTS
0001260002	GIVEN A SERIES OF OBJECTS OR SHAPES IN A PATTERN,	DESCRIBE OR SI
0001260003	AFTER SEEING A GIVEN PATTERN OF OBJECTS THAT HAS NO PATTERN OF OBJECTS.	MORE THA RN OI

0001270	PLACE VALUE	
0001270001	CONSTRUCTS SET THAT CONTAINS AS MANY OBJECTS AS A GIVEN	NUMBER. NS AS
0001270002	MATCHES TWO EQUIVALENT SETS OF OBJECTS IN A ONE-TO-ONE	RELATIONS OF
0001270003	IDENTIFIES TEN AS BEING ONE MORE THAN NINE.	MOR

ARRANGEMENT OF NUMERALS, 0-100, READS THEM ON REQUEST FROM ANY STARTING POINT.

VEN NUMBER OR BEFORE GIVEN NUMBER WITHOUT STRUCTURED GROUPS: TO 100.

TO MATCH A GIVEN NUMBER OR NUMBERS TO 99.

150.

TO 150.

AND BY 100'S, BY 10'S, 5'S, AND 2'S. STARTING WITH 100, 10, 5, AND 2 RESPECTIVELY.

JECTS OR SHAPES.

OR SHAPES IN A PATTERN, DESCRIBE THE NEXT STEP OF THE PATTERN.

RN OF OBJECTS THAT HAS NO MORE THAN FOUR PARTS, REPRODUCE FROM MEMORY THE SAME

NS AS MANY OBJECTS AS A GIVEN NUMBER.

S OF OBJECTS IN A ONE-TO-ONE RELATIONSHIP. MATCHES SETS TO TEN.

THAN NINE.

0001270004	IDENTIFIES THE IDEA OF GROUPING BY TENS.	
0001270005	STATES PLACE VALUE OF A PARTICULAR DIGIT.	
0001270006	WRITES THE DIGIT WHICH IS IN THE TENS OR ONES PLACE AS	REQUESTED FOR
0001270007	WRITES THE NUMERAL WHICH NAMES A STRUCTURED GROUP OF UP	TO 100 OBJECTS
0001270008	PLACES LESS THAN SYMBOL OR GREATER THAN SYMBOL TO 100.	INDICATE GREAT
0001270009	GIVEN ANY NUMBER TO 150, THE STUDENT WILL IDENTIFY THE	PLACE VALUE OF
0001270010	GIVEN THE PLACE VALUE OF THE DIGITS IN ANY NUMBER TO	150, THE STUDE

0001295	SETS	
0001295001	RECOGNIZE A GROUP OF OBJECTS THAT HAVE SOMETHING IN	COMMON.
0001295002	DISCRIMINATES SIMILARITIES AMONG OBJECTS.	
0001295003	DISCRIMINATES DIFFERENCES AMONG OBJECTS.	
0001295004	GIVEN A GROUP OF OBJECTS, RECOGNIZE THOSE THAT ARE THE ARE THE SAME COLOR.	SAME SIZE, THO
0001295005	GIVEN A GROUP OF OBJECTS WITH TWO OBJECTS DIFFERENT FROM	THE REST, REC
0001295006	SELECTS NON-EQUIVALENT SETS AND INDICATES WHICH HAS MORE	OR LESS.

G BY TENS.

ULAR DIGIT.

HE TENS OR ONES PLACE AS REQUESTED FOR A GIVEN NUMBER.

A STRUCTURED GROUP OF UP TO 100 OBJECTS AS - TENS AND - ONES.

ATER THAN SYMBOL TO INDICATE GREATER OR LESSER WITHOUT STRUCTURED GROUPS: T

TUDENT WILL IDENTIFY THE PLACE VALUE OF EACH DIGIT.

IGITS IN ANY NUMBER TO 150, THE STUDENT WILL NAME THE NUMBER.

HAT HAVE SOMETHING IN COMMON.

NG OBJECTS.

G OBJECTS.

GNIZE THOSE THAT ARE THE SAME SIZE, THOSE THAT ARE THE SAME SHAPE, OR THOSE THAT

TWO OBJECTS DIFFERENT FROM THE REST, RECOGNIZE THE OBJECTS THAT ARE DIFFERENT.

D CATES WHICH HAS MORE OR LESS.

0001295007 CONSTRUCTS NON-EQUIVALENT SETS AND INDICATES WHICH HAS MORE AND TS A

0001295008 PLACES LESS THAN SYMBOL OR GREATER THAN SYMBOL BETWEEN 2 NUMBERS GREAT
GROUPS: TO 9.

0001295009 PLACES GREATER THAN SYMBOL OR LESS THAN SYMBOL BETWEEN 2 NUMBERS OR LE
STRUCTURED GROUPS: TO 100.

0001295010 SELECTS A SET THAT CONTAINS AS MANY OBJECTS AS A GIVEN NUMBER. AS M

0001295011 COMPARES TWO NON-EQUIVALENT SETS AND INDICATES WHICH HAS MORE OR L SETS

0001295012 MATCHES TWO NONEQUIVALENT SETS AND INDICATES WHICH HAS MORE OR L TS A

0001295013 DETERMINE THAT 8 IS GREATER THAN 5 AND THAT 5 IS LESS THAN 8 BY THAN
THIS FOR ANY TWO NUMBERS LESS THAN 10. S TH

0001295014 COUNT THE MEMBERS OF A SET CONTAINING ONE HUNDRED OR FEWER MEM ONTA

0001295015 COMPARE TWO NON-MATCHING SETS OF LESS THAN 100 OBJECTS TO DECIDE S OF

0001295016 GIVEN EXAMPLES OF SETS, THE STUDENT IDENTIFIES EMPTY SET. STUD

0001295017 USE 0 AS THE SYMBOL FOR THE NUMBER OF ELEMENTS IN THE EMPTY SET E NU

0001295018 EXPRESS THE EMPTY SET.

0001295019 EXPRESS SUBSETS.

0001295020 IDENTIFY THE PROCESS OF ADDITION THROUGH EXPERIENCE WITH JOINING T TION

TS AND INDICATES WHICH HAS MORE AND LESS.

REATER THAN SYMBOL BETWEEN 2 NUMBERS TO INDICATE GREATER OR LESSER WITH STRUCTURED

R LESS THAN SYMBOL BETWEEN 2 NUMBERS TO INDICATE THE GREATER OR LESSER WITH

AS MANY OBJECTS AS A GIVEN NUMBER.

SETS AND INDICATES WHICH HAS MORE OR LESS THROUGH VISUAL INSPECTION.

TS AND INDICATES WHICH HAS MORE OR LESS.

THAN 5 AND THAT 5 IS LESS THAN 8 BY COMPARING APPROPRIATE SETS OF OBJECTS AND DO
S THAN 10.

ONTAINING ONE HUNDRED OR FEWER MEMBERS.

S OF LESS THAN 100 OBJECTS TO DECIDE WHICH SET HAS FEWER (MORE) MEMBERS.

STUDENT IDENTIFIES EMPTY SET.

E NUMBER OF ELEMENTS IN THE EMPTY SET.

TION THROUGH EXPERIENCE WITH JOINING TWO SETS OF OBJECTS.

0001295021 IDENTIFIES THE PLUS SIGN (+) AS IT IS RELATED TO JOINING OF TWO DISJOI IT

0001295022 EXPRESS THE UNION OF SETS.

0001295023 ADD DISJOINT SETS.

0001295024 USING SETS, THE STUDENT WILL ILLUSTRATE THE COMMUTATIVE PROPERTY OF A USTI

0001295025 IDENTIFY THE PROCESS OF SUBTRACTION THROUGH EXPERIENCE WITH SEPARATT TION

0001315 SUBTRACTION

0001315001 FILLS IN MISSING ADDENDS TO MAKE TRUE NUMBER SENTENCES FOR PICTURED TRU

0001315002 FILLS IN NUMBERS (MISSING ADDENDS) TO MAKE TRUE NUMBER SENTENCES FOR OS)

0001315003 IDENTIFIES THE INVERSE RELATION BETWEEN SUBTRACTION AND ADDITION (USI BETI

0001315004 IDENTIFIES THE INVERSE RELATION BETWEEN SUBTRACTION AND ADDITION (USI BETI

0001315005 IDENTIFIES THE ROLE OF ZERO IN SUBTRACTION PROBLEMS. SUBTI

0001315006 IDENTIFIES THE MINUS SIGN (-) AS A SYMBOL MEANING TAKE AWAY. S A S

0001315007 IDENTIFIES THE SOLUTION TO SUBTRACTION PROBLEMS AS BEING CALLED THE DI ACT

0001315008 FILLS IN MISSING SUMS TO MAKE TRUE NUMBER SENTENCES FOR PICTURED SUBT UE

IT IS RELATED TO JOINING OF TWO DISJOINT SETS.

LUSTRATE THE COMMUTATIVE PROPERTY OF ADDITION.

TION THROUGH EXPERIENCE WITH SEPARATING A SUBSET FROM A SET OF OBJECTS.

E TRUE NUMBER SENTENCES FOR PICTURED ADDITION SITUATIONS.

OS) TO MAKE TRUE NUMBER SENTENCES FOR PICTURED SUBTRACTION SITUATIONS.

BETWEEN SUBTRACTION AND ADDITION (USING NUMERALS THROUGH 5).

BETWEEN SUBTRACTION AND ADDITION (USING NUMERALS 6-9).

SUBTRACTION PROBLEMS.

S A SYMBOL MEANING TAKE AWAY.

RACTION PROBLEMS AS BEING CALLED THE DIFFERENCE.

UMBER SENTENCES FOR PICTURED SUBTRACTION SITUATIONS.

0001315009 SOLVES SUBTRACTION EQUATIONS OF SETS NOT LARGER THAN 5, (FIRST H

0001315010 SOLVES SUBTRACTION EQUATIONS OF SETS 6-9.

0001315011 IDENTIFIES THE RELATIONSHIP IN FINDING A MISSING ADDEND AND FIND

0001315012 SOLVES SUBTRACTION EQUATION RELATED TO A SET OF 10. FIRST HO

0001315013 SOLVES SUBTRACTION EQUATIONS WITH DIFFERENCES TO 10. (FIRST H

0001315014 IDENTIFIES THE IDEA OF SUBTRACTING IN PARTS USING MORE THAN ONE

0001315015 SOLVES SUBTRACTION EQUATION OF SETS TO 19.

0001320 SUBTRACTION (WORD PROBLEMS)

0001320001 SOLVE WORD PROBLEMS INVOLVING SUBTRACTION OF TWO 2 DIGIT NUMERALS

0001325 VALUE OF COINS

0001325001 RECOGNIZES PENNY, ITS VALUE AND SYMBOL.

0001325002 USES CENTS SIGN.

0001325003 USES TERM CENT.

0001325004 RECOGNIZES NICKEL, DIME.

NS OF SETS NOT LARGER THAN 5, (FIRST HORIZONTAL, THEN VERTICAL).

NS OF SETS 6-9.

P IN FINDING A MISSING ADDEND AND FINDING A DIFFERENCE.

N RELATED TO A SET OF 10. FIRST HORIZONTAL; THEN VERTICAL.

NS WITH DIFFERENCES TO 10. (FIRST HORIZONTAL; THEN VERTICAL).

TRACTING IN PARTS USING MORE THAN ONE STEP.

N OF SETS TO 19.

)

ING SUBTRACTION OF TWO 2 DIGIT NUMERALS.

E AND SYMBOL.

0001325005 FINDS VALUE OF PENNIES AND NICKELS.

0001325006 RECOGNIZE THE COMPARATIVE VALUE OF COINS (PENNIES, NICKELS, DIMES).

0001325007 RECOGNIZES QUARTER.

0001325008 IDENTIFIES HALF DOLLAR AND DOLLAR.

0001325009 MATCHES COINS WITH NUMERICAL VALUES.

0001325010 ADD TO 50 CENTS.

0001325011 SELECT FROM A GROUP OF COINS A COMBINATION OF COINS THAT TOTALS 75 CENTS.

0001325012 USE COINS IN MAKING CHANGE (PENNIES, NICKELS, DIMES).

0001325013 UNDERSTAND THAT PRICE TAGS ARE RECORDED MEASUREMENTS OF MONEY.

0002005	ADDITION	
0002005001	USES THE NUMBER LINE IN WORKING WITH ADDITION CONCEPT.	KING
0002005002	RECOGNIZES AND USES THE SYMBOLS + AND =.	BOLS
0002005003	FILLS IN NUMBERS (MISSING SUMS TO MAKE TRUE NUMBER SENTENCES	UMS
0002005004	RECOGNIZE ZERO AS THE IDENTITY ELEMENT FOR ADDITION IN THE SET OF	ITY
0002005005	WRITES THE NUMBER OF OBJECTS IN EACH OF TWO SETS AND THE NUMBER OF	S IN
0002005006	WRITES EQUATIONS RELATED TO A PARTICULAR SET (OR FAMILY) TO 10.	A P
0002005007	RECOGNIZES THE COMMUTATIVE (ORDER) PRINCIPLE IN ADDITION.	(ORD
0002005008	DISCOVER FROM THE ADDITION TABLE, NUMBER PATTERNS THROUGH TH	TABL
0002005009	CAN DEMONSTRATE THAT THE MATHEMATICAL OPERATION OF INTERSECTI	THEM
0002005010	BEGIN TO APPRECIATE USE OF TEN TO MAKE ADDITION EASY.	TEN
0002005011	USES PARENTHESES AND ASSOCIATIVE PRINCIPLE TO SHOW WHICH NUMBERS AR	ATIV
0002005012	RECALL THE ADDITION FACTS THROUGH THE SUM OF 18.	HROU
0002005013	GIVEN ANY NUMBER TO 18, STUDENT WILL RE-NAME NUMBER IN ALL POSSIB	DENT
0002005014	ADD TWO 1 DIGIT NUMBERS VERTICALLY AND/OR HORIZONTALLY WHERE THE	TICA

KING WITH ADDITION CONCEPT.

BOLS + AND =.

UMS TO MAKE TRUE NUMBER SENTENCES.

ITY ELEMENT FOR ADDITION IN THE SET OF WHOLE NUMBERS.

S IN EACH OF TWO SETS AND THE NUMBER OF OBJECTS WHEN PUT TOGETHER. SUMS TO 10.

A PARTICULAR SET (OR FAMILY) TO 10.

(ORDER) PRINCIPLE IN ADDITION.

TABLE. NUMBER PATTERNS THROUGH THE SUM 18.

THEMATICAL OPERATION OF INTERSECTION IS RELATED TO ADDITION.

TEN TO MAKE ADDITION EASY.

ATIVE PRINCIPLE TO SHOW WHICH NUMBERS ARE ADDED FIRST.

HROUGH THE SUM OF 18.

DENT WILL RE-NAME NUMBER IN ALL POSSIBLE ADDITION COMBINATIONS.

TICALLY AND/OR HORIZONTALLY WHERE THE SUM IS NOT GREATER THAN 18.

0002005015 RECOGNIZES THAT TWO EVEN ADDENDS PRODUCE AN EVEN SUM. PRO

0002005016 RECOGNIZES THAT TWO ODD ADDENDS PRODUCE AN EVEN SUM. PROD

0002005017 FIND THE MISSING NUMBER IN AN ADDITION PROBLEM WHERE THE NUMERALS ARE L DITI

0002005018 STUDENT USES THE HORIZONTAL AND VERTICAL ALGORISMS TO SOLVE PROBLEMS VERT

0002005019 GIVEN ONE MEMBER OF A RELATED NUMBER FACT WITH SUMS TO 18, THE STUDEN MBER

0002005020 USING SETS, STUDENT WILL ILLUSTRATE THE ASSOCIATIVE PROPERTY OF AD ATE

0002005021 USES ASSOCIATIVE (GROUPING) PRINCIPLE FOR FINDING SUMS GREATER THAN 1 CIPL

0002005022 THE STUDENT USES EXPANDED NOTATION TO ADD PAIRS OF TWO- DIGIT NUMERALS ON T

0002005023 ADD THREE 2 DIGIT NUMERALS WITHOUT REGROUPING. UT R

0002005024 FINDS SUMS OF THREE AND FOUR DIGIT NUMBERS WITHOUT REGROUPING. IT N

0002005025 SOLVES COLUMN ADDITION PROBLEMS WITH THREE OR MORE ADDENDS WITH S WITH

0002010 ADDITION (WORD PROBLEMS)

0002010001 READS AND TRANSFERS INFORMATION FROM A WORD PROBLEM TO THE SYMBOLS OF FROM

0002010002 SOLVE WORD PROBLEMS FOR ADDITION PROBLEMS WHERE THE SUM IS NOT GREATER PRO

PRODUCE AN EVEN SUM.

PRODUCE AN EVEN SUM.

DITION PROBLEM WHERE THE NUMERALS ARE LESS THAN 18.

VERTICAL ALGORISMS TO SOLVE PROBLEMS OF ADDITION WITH SUMS TO 18.

MBER FACT WITH SUMS TO 18, THE STUDENT NAMES THE OTHER THREE MEMBERS.

ATE THE ASSOCIATIVE PROPERTY OF ADDITION.

CIPLE FOR FINDING SUMS GREATER THAN 10.

ON TO ADD PAIRS OF TWO- DIGIT NUMERALS.

UT REGROUPING.

IT NUMBERS WITHOUT REGROUPING.

WITH THREE OR MORE ADDENDS WITH SUMS TO 18.

FROM A WORD PROBLEM TO THE SYMBOLS OF ARITHMETIC TO SOLVE THE PROBLEM.

EMS WHERE THE SUM IS NOT GREATER THAN 18.

0002030	DIVISION	
0002030001	IDENTIFIES THE SYMBOL OF DIVISION.	VIS
0002030002	RECOGNIZES THAT DIVISION IS THE INVERSE OF	MULTIPLIC S TH
0002045	FRACTIONS	
0002045001	USES CONCRETE AND SEMI-CONCRETE DEVICES TO DIVIDE AN	OBJECT OR CRETI
0002045002	IDENTIFIES ONE HALF, ONE THIRD, ONE FOURTH, ONE FIFTH	OF AN OBJ HIRD.
0002045003	IDENTIFIES TWO THIRDS AND THREE FOURTHS OF A WHOLE	OBJECT. THREI
0002045004	USES CONCRETE AND SEMI-CONCRETE DEVICES TO DIVIDE A SET	OF OBJECT CRETI
0002045005	IDENTIFIES ONE HALF, ONE THIRD, ONE FOURTH, ONE FIFTH	SET OF OB HIRD.
0002045006	IDENTIFIES TWO-THIRDS AND THREE-FOURTHS OF A WHOLE SET	OF OBJECT THREI
0002045007	RECOGNIZES THE NUMERALS OF ONE-HALF, ONE-THIRD, ONE-	FOURTH, O ONE
0002060	GEOMETRY (PLANE FIGURES) - CIRCLE -	CIR
0002060001	RECOGNIZES AND NAMES CIRCLE.	E.
0002065	GEOMETRY (PLANE FIGURES) - CONGRUENCE -	CON

VISION.

S THE INVERSE OF MULTIPLICATION.

CRETE DEVICES TO DIVIDE AN OBJECT OR INTO HALVES, THIRDS, FOURTHS, FIFTHS.

HIRD, ONE FOURTH, ONE FIFTH OF AN OBJECT, IN VARIOUS WAYS.

THREE FOURTHS OF A WHOLE OBJECT.

CRETE DEVICES TO DIVIDE A SET OF OBJECTS INTO HALVES, THIRDS, FOURTHS, FIFTHS.

HIRD, ONE FOURTH, ONE FIFTH SET OF OBJECTS IN VARIOUS WAYS.

THREE-FOURTHS OF A WHOLE SET OF OBJECTS.

ONE-HALF, ONE-THIRD, ONE- FOURTH, ONE-FIFTH, TWO-THIRDS, THREE-FOURTHS.

CIRCLE -

.

CONGRUENCE -

0002065001 RECOGNIZE CONGRUENT SEGMENTS AS SEGMENTS HAVING THE SAME LENGTH.

0002065002 RECOGNIZE CONGRUENT, PLANE FIGURES AS FIGURES WHICH FIT ON ONE ANOTHER

0002070 GEOMETRY (PLANE FIGURES) - CONSTRUCTIONS -

0002070001 DRAW SIMPLE GEOMETRIC FIGURES.

0002080 GEOMETRY (PLANE FIGURES) - LINES -

0002080001 NAMES LINE SEGMENTS BY ENDPOINTS.

0002085 GEOMETRY (PLANE FIGURES) - OPEN/CLOSED FIGURES -

0002085001 READS DIRECTIONS WITH NAMES OF SIMPLE GEOMETRIC FIGURES.

0002085002 LABEL SIMPLE GEOMETRIC FIGURES.

0002085003 RECOGNIZES OPEN AND CLOSED FIGURES.

0002085004 INDICATES UNDERSTANDING OF TERM REGION BY SHADING REGIONS OF SIM

0002095 GEOMETRY (PLANE FIGURES) - QUADRILATERALS -

0002095001 RECOGNIZES AND NAMES RECTANGLE.

SEGMENTS HAVING THE SAME LENGTH.

ES AS FIGURES WHICH FIT ON ONE ANOTHER.

RUCTIONS -

-

CLOSED FIGURES -

IMPLE GEOMETRIC FIGURES.

ES.

REGION BY SHADING REGIONS OF SIMPLE CLOSED CURVES.

ILATERALS -

0002095002 RECOGNIZES AND NAMES SQUARE.

0002100 GEOMETRY (PLANE FIGURES) - SETS OF POINTS -

0002100001 LABEL POINTS IN LINE.

0002100002 RECOGNIZE A POINT AS A POSITION.

0002100003 IDENTIFIES CURVES, LINES, LINE SEGMENTS, CORNERS.

0002100004 RECOGNIZE A LINE SEGMENT OR CURVE AS A SET OF POINTS.

0002100005 RECOGNIZE A STRAIGHT LINE AS A SET OF POINTS WITH NO BEGINNING

0002100006 RECOGNIZE A SIMPLE CURVE (IN A PLANE) AS ONE THAT DOES NOT CROSS

0002100007 RECOGNIZE CLOSED SIMPLE CURVES.

0002100008 RECOGNIZE THE INSIDE AND OUTSIDE OF SIMPLE CLOSED CURVES.

0002125 GEOMETRY (PLANE FIGURES) - TRIANGLE -

0002125001 RECOGNIZES AND NAMES TRIANGLE.

0002135 GEOMETRY (SOLIDS)

SETS OF POINTS -

TION.

INE SEGMENTS, CORNERS.

CURVE AS A SET OF POINTS.

S A SET OF POINTS WITH NO BEGINNING AND NO END.

N A PLANE) AS ONE THAT DOES NOT CROSS ITSELF.

VES.

TSIDE OF SIMPLE CLOSED CURVES.

TRIANGLE -

LE.

0002135001	NAMES PICTURED REPRESENTATIONS OF SOLIDS - RECTANGLE,	SQUARE, CIRCLE
0002135002	SELECTS CORRECT PICTURED REPRESENTATION WHEN NAME OF	SOLID IS GIVEN
0002135003	DRAWS PICTURED REPRESENTATIONS OF SOLIDS WHEN NAME OF	SOLID IS GIVEN
0002170	MEASUREMENT (DRY)	
0002170001	USE STANDARD UNITS TO NEAREST WHOLE UNIT FOR WEIGHT	(POUNDS).
0002175	MEASUREMENT (INSTRUMENTS)	
0002175001	IDENTIFY PROPER INSTRUMENTS FOR MEASURING DIFFERENT	OBJECTS.
0002180	MEASUREMENT (LINEAR)	
0002180001	IDENTIFIES INCH, FOOT, YARD AS STANDARD U.S. MEASURE.	
0002180002	USES STANDARD UNITS TO THE NEAREST WHOLE UNIT FOR	LINEAR MEASURE
0002180003	REPRESENTS LENGTH OF ITEMS TO NEAREST INCH IN LINEAR	MEASURES.
0002180004	MEASURES ITEMS USING THE INCH SCALES.	
0002180005	MAKE A RULER WITH DIVISIONS SHOWING HALF UNITS.	

F SOLIDS = RECTANGLE, SQUARE, CIRCLE, TRIANGLE.

NTATION WHEN NAME OF SOLID IS GIVEN.

F SOLIDS WHEN NAME OF SOLID IS GIVEN.

OLE UNIT FOR WEIGHT (POUNDS).

MEASURING DIFFERENT OBJECTS.

TANDARD U.S. MEASURE.

ST WHOLE UNIT FOR LINEAR MEASURE (INCHES AND FEET).

AREST INCH IN LINEAR MEASURES.

ALES.

ING HALF UNITS.

0002180006	MEASURES ITEMS USING THE CENTIMETER SCALES.	NTIM
0002185	MEASUREMENT (LIQUID)	
0002185001	IDENTIFIES CONTAINERS AS CUPS, PINTS, QUARTS, GALLONS.	PS,
0002185002	IDENTIFIES CONTAINERS' RELATION TO EACH OTHER.	TION
0002185003	USE STANDARD UNITS TO NEAREST WHOLE UNIT FOR LIQUID	MEASURE ST W
0002185004	SOLVES SIMPLE WRITTEN PROBLEMS USING CUPS, PINTS,	QUARTS, G EMS
0002210	MEASUREMENT (TIME)	
0002210001	RELATE CONCEPT OF TIME MEASUREMENT WITH SUCH UNITS AS	YEAR, MON UREM
0002210002	TELLS TIME TO THE HOUR AND HALF HOUR.	HALF
0002210003	TELL TIME TO THE NEAREST QUARTER HOUR.	ARTE
0002220	MULTIPLICATION	
0002220001	ADD EQUIVALENT SETS.	
0002220002	FINDS PRODUCTS USING PRODUCT SETS (MANY TO MANY	MATCHING) T SE

NTIMETER SCALES.

PS, PINTS, QUARTS, GALLONS.

TION TO EACH OTHER.

ST WHOLE UNIT FOR LIQUID MEASURE (PINTS AND QUARTS).

EMS USING CUPS, PINTS, QUARTS, GALLONS.

UREMENT WITH SUCH UNITS AS YEAR, MONTH, WEEK, DAY, HOUR, MINUTE AND SECOND.

HALF HOUR.

ARTER HOUR.

T SETS (MANY TO MANY MATCHING).

0002220003	FINDS PRODUCTS USING REPEATED ADDITION.		DITI
0002220004	FINDS PRODUCTS USING NUMBER LINES.		S.
0002220005	FINDS PRODUCTS USING EQUIVALENT SETS.		SETS
0002220006	FINDS PRODUCTS USING ARRAYS.		
0002220007	IDENTIFIES THE SYMBOL X (TIMES).		
0002220008	RECOGNIZES THE MULTIPLICATIVE PROPERTIES OF ZERO AND	ONE.	OPER
0002220009	RECOGNIZE A MULTIPLICATION FACT THAT REPRESENTS A GIVEN	REPEATED ADDIT	THAT
0002220010	USE THE MULTIPLICATION FACTS THROUGH THE PRODUCT 18.		OUGH
0002220011	ONE FACTOR = 2, SECOND FACTOR NO GREATER THAN 14, VERTICAL FORM.	STUDENT SOLVES	GRE
0002220012	MULTIPLY 2 NUMERALS WHERE THE PRODUCT IS NOT GREATER	THAN 25.	ODUC
0002220013	USE ASSOCIATIVE PROPERTY OF MULTIPLICATION IN SET OF	WHOLE NUMBERS.	IPLI
0002220014	USES SET INTERPRETATION OF MULTIPLICATION FOR SOLVING	WRITTEN PROBLE	PLIC
0002225	NUMBER SENTENCES		
0002225001	WRITE AN EQUATION FOR A PICTURED ADDITION PROBLEM WHERE	THE SUM OF THE	ADD

DITION.	
S.	
SETS.	
OPERTIES OF ZERO AND	ONE.
THAT REPRESENTS A GIVEN	REPEATED ADDITION FACT.
OUGH THE PRODUCT 18.	
GREATER THAN 14.	STUDENT SOLVES MULTIPLICATION PROBLEM, HORIZONTAL AND
ODUCT IS NOT GREATER	THAN 25.
IPLICATION IN SET OF	WHOLE NUMBERS. (4 X 3) X 2 = 4 X (3 X 2).
PLICATION FOR SOLVING	WRITTEN PROBLEMS.
ION PROBLEM WHERE	THE SUM OF THE NUMERALS IS NOT GREATER THAN 18.

0002225002	WRITE AN EQUATION FOR A PICTURED SUBTRACTION PROBLEM	WHERE THE TURED
0002225003	GIVEN ADDITION PROBLEM WITH TWO ADDENDS AND THE SUM, WRITE AN SAME NUMERALS: TO 10.	TWO
0002225004	FIND SOLUTIONS FOR SENTENCES LIKE 3 + 2 = 8 = X, USING	NUMBER LI S LIK
0002225005	USE THE TERMS GREATER THAN AND LESS THAN, AND EQUALS IN SENTEN	AND
0002225006	PLACE THE CORRECT SYMBOL IN THE PLACEHOLDER IN SENTENCES LIKE 13 +	THE
0002225007	USE SENTENCES LIKE 5 + X = 12, X + 6 = 8, 12 = X = 8, SOLUTIONS FOR THE SENTENCES.	AND X = 5 12, X
0002225008	FIND SOLUTIONS FOR SENTENCES LIKE 3 + 2 = 8 = X, X + 5 = 8 + 7, 8 WITH THE AID OF SETS OF OBJECTS.	S LIK CTS.
0002225009	PLACES GREATER THAN, LESS THAN BETWEEN TWO NUMBERS TO INDICATE	HAN
0002225010	SELECTS WHICH OF TWO (OR THREE) NUMBERS IS GREATER	(GREATEST REF)
0002225011	WRITES GREATER THAN, LESS THAN TO SHOW INEQUALITIES OF FOUR-DIGI	HAN
0002225012	USE THE CORRECT SYMBOL (LESS THAN, = GREATER THAN), THAT BELONGS B HAS MORE THAN 3 DIGITS.	S THA
0002230	NUMBER SYSTEMS (EARLY)	
0002230001	RECOGNIZES ROMAN NUMERALS AS ANOTHER SYSTEM OF	NUMERATIO AND
0002230002	RELATES TO THE ROMAN CONCEPT OF NUMERATION. EX. VI	MEANS 5 + OF

TURED SUBTRACTION PROBLEM WHERE THE MINUEND IS NOT GREATER THAN 18.

TWO ADDENDS AND THE SUM. WRITE AN EQUATION FOR A SUBTRACTION PROBLEM USING THE

S LIKE 3 + 2 = 8 = X, USING NUMBER LINE.

AND LESS THAN, AND EQUALS IN SENTENCES.

THE PLACEHOLDER IN SENTENCES LIKE 13 * 5 = 8 AND 15 * 3 = 5.

12, X + 6 = 8, 12 = X = 8, AND X = 5 = 6 TO REPRESENT PHYSICAL SITUATIONS AND FIND

S LIKE 3 + 2 = 8 = X, X + 5 = 8 + 7, 8 + X LESS THAN 12, AND 4 + 9 GREATER THAN X + 5,
ECTS.

THAN BETWEEN TWO NUMBERS TO INDICATE THE GREATER OR LESSER NUMBER: TO 100.

REF) NUMBERS IS GREATER (GREATEST), SMALLER, (SMALLEST), FOR NUMBERS TO 100.

THAN TO SHOW INEQUALITIES OF FOUR-DIGIT NUMERALS.

S THAN, = GREATER THAN), THAT BELONGS BETWEEN TWO GIVEN NUMERALS, WHEN NEITHER NUMERAL

S ANOTHER SYSTEM OF NUMERATION.

OF NUMERATION. EX: VI MEANS 5 + 1, IV MEANS 5 = 1.

0002230003 USES ROMAN NUMERALS TO XXXIX.

0002250 NUMBERS (WHOLE)

0002250001 RECOGNIZES THE SET OF WHOLE NUMBERS.

0002250002 IDENTIFIES THE SET OF EVEN NUMBERS.

0002250003 IDENTIFIES THE SET OF ODD NUMBERS.

0002250004 RECOGNIZE THAT THERE IS NO LARGEST WHOLE NUMBER.

0002255 NUMERALS

0002255001 READS NUMBER WORDS 0-10.

0002255002 SPELLS NUMBER WORDS 0-10.

0002255003 STUDENT READS THE NUMBER WORDS TO TWENTY.

0002255004 WRITE NUMBER WORDS TO TWENTY.

0002255005 STUDENT WILL NAME CARDINAL NUMBER OF ANY GIVEN SET TO 20.

0002255006 USE ORDINAL NUMBERS THROUGH TENTH.

0002255007 WRITE MANY SYMBOLS FOR THE SAME NUMBER; FOR EXAMPLE, 6 + 3, 5 + 5, 1

ERS.

RS.

S.

ST WHOLE NUMBER.

TWENTY.

R OF ANY GIVEN SET TO 20.

U FOR EXAMPLE, 6 + 3, 5 + 5, 17 - 8, AND 9 FOR NINE.

0002255008 COUNTS BY MULTIPLES OF 3, 4, 5, AND 10.

0002255009 READS SHORT SEQUENCES OF NUMBERS FROM ANY STARTING POINT TO 100.

0002255010 WRITES SHORT SEQUENCES OF NUMBERS FROM ANY STARTING POINT TO

0002255011 READS NUMERALS 0-100.

0002255012 WRITES NUMBERS 0-100.

0002255013 COMPLETE EXERCISES FOR COUNTING BY TENS AND FIVE FROM ANY START

0002255014 SUPPLIES THE NUMBER THAT COMES BEFORE, AFTER, OR BETWEEN ANY GIVEN

0002255015 ARRANGE GIVEN NUMBERS IN ORDER FROM THE LEAST TO THE GREATEST

0002255016 COUNT BY 5'S, 10'S, AND 100'S.

0002255017 LIST THE ODD NUMBERS FROM 1-99.

0002255018 LIST THE EVEN NUMBERS FROM 2-100.

0002255019 STUDENT WILL COUNT BY 2'S, 5'S, AND 10'S TO 200.

0002255020 COUNTS AND WRITES ORDERED SEQUENTIAL NUMERALS LESS THAN 1000.

0002255021 SKIP-COUNTS BY TENS, HUNDREDS, THOUSANDS FROM ANY GIVEN NUMERAL U

4, 5, AND 10.

UMBERS FROM ANY STARTING POINT TO 100.

NUMBERS FROM ANY STARTING POINT TO 100.

NTING BY TENS AND FIVE FROM ANY STARTING POINT: TO 100.

OMES BEFORE, AFTER, OR BETWEEN ANY GIVEN NUMBERS TO 100.

RDER FROM THE LEAST TO THE GREATEST TO 100.

0'S.

1-99.

2-100.

5'S, AND 10'S TO 200.

SEQUENTIAL NUMERALS LESS THAN 1000.

EDS, THOUSANDS FROM ANY GIVEN NUMERAL UP TO 9,999.

0002255022 READ ANY NUMERAL THROUGH 999.

0002255023 STUDENT WRITES NUMBERS TO 999.

0002260 PATTERNS

0002260001 RECOGNIZE RELATIONSHIP BETWEEN GEOMETRIC AND NUMERICAL PATTERNS. EOME

0002270 PLACE VALUE

0002270001 RENAMES TEN ONE AS ONE TEN.

0002270002 RENAMES ONE GREATER THAN TEN AS TENS AND ONES. TENS

0002270003 WRITES TWO-DIGIT NUMERALS IN EXPANDED NOTATION (ONES AND TENS). ANDE

0002270004 RENAMES ONE TEN AS TEN ONES, ADDS TEN ONES TO ONES AS GIVEN. EX. S S TE

0002270005 RECOGNIZE THE ONES, TENS, AND HUNDREDS PLACE IN A 3 DIGIT NUMERAL. NDRE

0002270006 GIVEN THE PLACE VALUE OF THE DIGITS IN ANY NUMBER TO 999, STUDENT W ITS

0002270007 GIVEN ANY NUMBER TO 999, THE STUDENT WILL IDENTIFY THE PLACE VALUE OF DENT

0002270008 WRITE THREE-DIGIT NUMERALS IN EXPANDED NOTATION; FOR EXAMPLE, 765 = PAND

0002270009 IDENTIFIES PLACE VALUE OF GIVEN NUMERALS AS ONES, TENS, HUNDREDS, AND NUME
OR NUMBERS.

EOMETRIC AND NUMERICAL PATTERNS.

TENS AND ONES.

ANDED NOTATION (ONES AND TENS).

S TEN ONES ,O ONES AS GIVEN. EX. 56 = 4 TENS, 16 ONES.

NDREDS PLACE IN A 3 DIGIT NUMERAL.

ITS IN ANY NUMBER TO 999, STUDENT WILL NAME THE NUMBER.

DENT WILL IDENTIFY THE PLACE VALUE OF EACH DIGIT.

PANDED NOTATION; FOR EXAMPLE, 765 = 700 + 60 + 5.

NI .S AS ONES, TENS, HUNDREDS, AND THOUSANDS (FOUR DIGIT NUMERALS) IN WORDS

0002270010 PLACES THE NUMBER THAT COMES BEFORE, AFTER, OR BETWEEN ANY GIVEN S REF

0002270011 WRITES FOUR DIGIT NUMERALS IN EXPANDED NOTATION. N EX

0002295 SETS

0002295001 IDENTIFIES EQUIVALENT SETS 0-10. 0-10.

0002295002 IDENTIFIES NON-EQUIVALENT SETS 0-10. TS 0

0002295003 ADD EQUIVALENT SETS.

0002295004 IDENTIFY THE PROCESS OF MULTIPLICATION THROUGH OBJECTS. EXPERIENC IPLI

0002315 SUBTRACTION

0002315001 FILLS IN ADDENDS TO MAKE TRUE NUMBER SENTENCES. UE NU

0002315002 COMPLETES EXERCISES ON INVERSE RELATION BETWEEN ADDITION AND SUBTR RSE R

0002315003 FINDS DIFFERENCES USING THE NUMBER LINE. NUMB

0002315004 USES NUMBER LINE TO FIND MISSING ADDENDS. SSING

0002315005 RECOGNIZE THAT SUBTRACTION IS NOT COMMUTATIVE. S NO

0002315006 SUBTRACT A 1 DIGIT NUMERAL FROM A LARGER 1 DIGIT NUMERAL VERTICALL ROM

S BEFORE, AFTER, OR BETWEEN ANY GIVEN THREE OR FOUR DIGIT NUMERALS.

N EXPANDED NOTATION.

0-10.

TS 0-10.

IPLICATION THROUGH EXPERIENCE WITH JOINING SEVERAL EQUIVALENT SETS OF

JE NUMBER SENTENCES.

RSE RELATION BETWEEN ADDITION AND SUBTRACTION TO 10.

NUMBER LINE.

SSING ADDENDS.

S NOT COMMUTATIVE.

R LARGER 1 DIGIT NUMERAL VERTICALLY AND/OR HORIZONTALLY.

0002315007	RECOGNIZE ZERO AS THE IDENTITY ELEMENT FOR SUBTRACTION	IN THE SET OF
0002315008	SOLVES TWO DIGIT SUBTRACTION EQUATIONS WITHOUT	REGROUPING.
0002315009	IDENTIFIES THE INVERSE RELATIONSHIP OF SUBTRACTION AND	ADDITION IN US
0002315010	RECOGNIZES AND USES SYMBOLS (=) AND (≠).	
0002315011	SOLVES SUBTRACTION EQUATIONS FROM SETS, 0-9.	
0002315012	RECOGNIZES INVERSE RELATIONSHIP OF ADDITION AND	SUBTRACTION TH
0002315013	USES HORIZONTAL AND VERTICAL PATTERNS FOR SUBTRACTION.	
0002315014	FIND THE MISSING NUMBER IN A SUBTRACTION PROBLEM WHERE	THE NUMERALS A
0002315015	RECALL THE SUBTRACTION FACTS THROUGH SUM OF 18.	
0002315016	SUBTRACT NUMERALS WHERE THE MINUEND IS NOT GREATER THAN	18.
0002315017	RECOGNIZES THE INEQUALITIES IN PREPARATION FOR	SUBTRACTING WI
0002315018	BEGIN TO APPRECIATE USE OF TEN TO MAKE SUBTRACTION EASY.	
0002315019	REGROUPS TENS IN TWO DIGIT NUMBERS FOR SUBTRACTION.	
0002315020	SUBTRACT 2 DIGIT NUMERALS WITHOUT REGROUPING.	

LEMENT FOR SUBTRACTION IN THE SET OF WHOLE NUMBERS.

ATIONS WITHOUT REGROUPING.

HIP OF SUBTRACTION AND ADDITION IN USING 0-9.

AND (=).

M SETS, 0-9.

OF ADDITION AND SUBTRACTION THROUGH 18.

TERNS FOR SUBTRACTION.

TRACTION PROBLEM WHERE THE NUMERALS ARE LESS THAN 18.

OUGH SUM OF 18.

END IS NOT GREATER THAN 18.

REPARATION FOR SUBTRACTING WITH REGROUPING.

O MAKE SUBTRACTION EASY.

RS FOR SUBTRACTION.

REGROUPING.

0002315021 SUBTRACT 2 DIGIT NUMERALS WITH REGROUPING, ITH R

0002315022 SOLVES SUBTRACTION EQUATIONS INVOLVING THREE AND FOUR DIGIT NUME S INV

0002320 SUBTRACTION (WORD PROBLEMS)

0002320001 SOLVE WORD PROBLEMS FOR SUBTRACTION WHERE THE MINUEND IS NOT GRE TRACT

0002325 VALUE OF COINS

0002325001 IDENTIFIES THE COINS, PENNY, NICKEL, DIME, QUARTER, HALF DOLLA NIC

0002325002 MAKE CHANGE CORRECTLY FOR QUANTITIES UP TO 25 CENTS, ANTI

0002325003 GIVES CHANGE IN SMALLEST NUMBER OF COINS FOR VALUES TO 75 CENTS. MBER

0002325004 SOLVES ADDITION AND SUBTRACTION MONEY PROBLEMS, AMOUNTS LESS THAN TION

0002325005 GIVES VALUE OF COIN COLLECTIONS INVOLVING ALL U.S. COINS BY COUNTIN IONS

0002325006 SELECTS COINS EQUAL IN VALUE TO SUMS TO $1.00 OUT OF A SET OF MIX E TO

ITH REGROUPING.

S INVOLVING THREE AND FOUR DIGIT NUMERALS; NO REGROUPING.

FRACTION WHERE THE MINUEND IS NOT GREATER THAN 18.

, NICKEL, DIME, QUARTER, HALF DOLLAR.

ANTITIES UP TO 25 CENTS.

MBER OF COINS FOR VALUES TO 75 CENTS.

TION MONEY PROBLEMS, AMOUNTS LESS THAN $1.00.

IONS INVOLVING ALL U.S. COINS BY COUNTING TO $1.00.

E TO SUMS TO $1.00 OUT OF A SET OF MIXED COINS.

0003005	ADDITION	
0003005001	DISCOVER NUMBER PATTERNS FROM THE ADDITION TABLES.	
0003005002	GIVEN ANY NUMBER SENTENCE, STUDENT IDENTIFIES THE	REMAINING MEMB
0003005003	USES COMMUTATIVE PRINCIPLE OF ADDITION.	
0003005004	USES ZERO (IDENTITY) AND ONE PRINCIPLE OF ADDITION.	
0003005005	GIVEN THE SUM AND ONE ADDEND IN AN ADDITION PROBLEM,	FIND THE MISSI
0003005006	WRITES ADDITION, EQUATIONS WITH ADDENDS AND USES VARYING	NUMBERS OF DIG
0003005007	WRITES RELATED ADDITION EQUATIONS FOR GIVEN SETS, NUMBER	LINES.
0003005008	FINDS SUMS COLUMN ADDITION, NO REGROUPING ONE OR TWO	DIGIT NUMBERS,
0003005009	STUDENT USES THE VERTICAL ALGORISM TO SOLVE ADDITION	PROBLEMS OF TH
0003005010	ADD TWO 2 DIGIT NUMERALS BY USING EXPANDED NOTATION.	
0003005011	USES ASSOCIATIVE PRINCIPLE OF ADDITION TO ADD TWO OR	MORE DIGIT NUM
0003005012	DEMONSTRATE UNDERSTANDING OF GROUPING AND REGROUPING BY 3 HUNDREDS + X TENS + 4 ONES B. MEANS OF TALLY BOXES OR	COMPLETING SEN OTHER DEVICES.
0003005013	ADD THREE 2 DIGIT NUMERALS WITHOUT REGROUPING.	
0003005014	ADDS, WITH REGROUPING, THREE DIGIT NUMERALS, TWO	ADDENDS,

HE ADDITION TABLES.

ENT IDENTIFIES THE REMAINING MEMBERS OF THE ADDITION FAMILY.

DDITION.

INCIPLE OF ADDITION.

AN ADDITION PROBLEM. FIND THE MISSING ADDEND, USING INVERSE OPERATION.

ADDENDS AND USES VARYING NUMBERS OF DIGITS IN VERTICAL FORM.

NS FOR GIVEN SETS, NUMBER LINES.

REGROUPING ONE OR TWO DIGIT NUMBERS, MULTIPLE ADDENDS.

ISM TO SOLVE ADDITION PROBLEMS OF THREE AND FOUR DIGIT NUMERALS.

NG EXPANDED NOTATION.

DDITION TO ADD TWO OR MORE DIGIT NUMERALS.

DUPING AND REGROUPING BY MEANS OF TALLY BOXES OR COMPLETING SENTENCES SUCH AS 458 = X + 50 + 8 AND 394 = OTHER DEVICES.

OUT REGROUPING.

GIT NUMERALS, TWO ADDENDS.

0003010	ADDITION (WORD PROBLEMS)	
0003010001	SOLVE TO THE NEAREST MINUTE, 1 STEP ADDITION STORY	PROBLEMS
0003010002	WRITE AND SOLVE EQUATIONS FOR STORY PROBLEMS REQUIRING	ADDITION
0003010003	SOLVE WORD PROBLEMS FOR ADDITION OF 2 NUMERALS WITH NO	MORE THAN
0003030	DIVISION	
0003030001	FINDS MISSING FACTORS FOR BASIC FACTS.	
0003030002	DIVIDE GIVEN SET OF NO MORE THAN 20 ELEMENTS INTO	GROUPS OF
0003030003	WRITES DIVISION EQUATIONS FOR GIVEN NUMBER LINES.	
0003030004	WRITE DIVISION EQUATIONS FOR GIVEN SETS.	
0003030005	USES REPEATED SUBTRACTION TO SOLVE BASIC DIVISION	EQUATIONS
0003030006	FIND THE QUOTIENT OF A DIVISION PROBLEM WITH A 2 DIGIT SUBTRACTION.	DIVIDEND
0003030007	RECOGNIZES DIVISION AS THE INVERSE OF MULTIPLICATION.	
0003030008	USES THE ONE PRINCIPLE FOR DIVISION.	
0003030009	RECOGNIZES 0 IS NEVER A DIVISOR.	
0003030010	USING REPEATED SUBTRACTION WITH MULTIPLES OF THE THROUGH 25.	DIVISOR,

E, 1 STEP ADDITION STORY	PROBLEMS INVOLVING TIME.
FOR STORY PROBLEMS REQUIRING	ADDITION OF 1 OR 2 DIGIT NUMBERS.
DITION OF 2 NUMERALS WITH NO	MORE THAN 4 DIGITS.
BASIC FACTS.	
E THAN 20 ELEMENTS INTO	GROUPS OF EQUIVALENT SETS.
FOR GIVEN NUMBER LINES.	
OR GIVEN SETS.	
O SOLVE BASIC DIVISION	EQUATIONS.
SION PROBLEM WITH A 2 DIGIT	DIVIDEND AND A 1 DIGIT DIVISOR USING REPEATED
INVERSE OF MULTIPLICATION.	
DIVISION.	
ISOR.	
WITH MULTIPLES OF THE	DIVISOR, THE STUDENT WILL SOLVE PROBLEMS WITH DIVIDENDS

0003030011	USE THE DIVISION FACTS THROUGH 45.	
0003030012	FINDS MISSING QUOTIENTS FOR DIVISION EQUATIONS THROUGH	81 DIVIDED BY
0003030013	FINDS TWO AND THREE DIGIT QUOTIENTS THAT ARE MULTIPLES	OF 10 AND 100
0003030014	SOLVES DIVISION EQUATIONS WITHOUT REMAINDERS, USING QUOTIENTS.	STANDARD ALGOR
0003030015	DIVIDE A 3 DIGIT NUMERAL BY A 1 DIGIT NUMERAL (NO	REMAINDER).
0003030016	FIND THE QUOTIENT AND REMAINDER FOR DIVISION PROBLEM	WITH A 2 OR 3
0003030017	SOLVES DIVISION EQUATIONS WITH REMAINDERS, USING QUOTIENTS.	STANDARD ALGOR

0003035	ESTIMATION	
0003035001	ESTIMATE THE SUM OF TWO NUMBERS. FOR EXAMPLE, 287 + 520 IS APPROXIMATE	
0003035002	STUDENT ROUNDS NUMBERS TO TENS AND HUNDREDS IN	ESTIMATING DIF

0003045	FRACTIONS	
0003045001	RESPONDS TO NAMES OF COMMON FRACTIONS.	
0003045002	USES COMMON FRACTIONS IN DIVIDING OBJECTS.	
0003045003	USES COMMON FRACTIONS IN DIVIDING SETS.	

ION EQUATIONS THROUGH £1 DIVIDED BY 9.

TS THAT ARE MULTIPLES OF 10 AND 100; ONE DIGIT DIVISORS.

REMAINDERS, USING STANDARD ALGORITHM. ONE DIGIT DIVISORS, TWO DIGIT

IGIT NUMERAL (NO REMAINDER).

OR DIVISION PROBLEM WITH A 2 OR 3 DIGIT NUMBER BY A 1 DIGIT NUMBER.

MAINDERS, USING STANDARD ALGORITHM. ONE DIGIT DIVISORS, TWO DIGIT

FOR EXAMPLE, 287 + 520 IS APPROXIMATELY 300 + 500 OR 800.

D HUNDREDS IN ESTIMATING DIFFERENCES.

IONS.

OBJECTS.

0003045004	IDENTIFY TWO-THIRDS AND THREE-FOURTHS OF A WHOLE.	REE-F
0003045005	STUDENT IDENTIFIES FIFTHS, SIXTHS, AND EIGHTHS OF SETS	OF OBJECT SIXT
0003045006	RELATE THE PROPER FRACTION (HALVES, THIRDS, FOURTHS, GIVEN SET OR FIGURE.	FIFTHS, S (HAL
0003045007	STUDENT IDENTIFIES RATIONAL NUMBERS FOR INDICATING	FIFTHS, S NUM
0003045008	STUDENT WRITES RATIONAL NUMBERS FOR INDICATING FIFTHS,	SIXTHS, A MBERS
0003045009	GIVEN THE FRACTION ONE-HALF, ONE-THIRD, ONE-FOURTH, ONE- SUPPLY A MINIMUM OF TWO EQUIVALENT FRACTIONS FOR EACH.	FIFTH, ONE F, ON UIVAL
0003045010	IDENTIFIES FRACTIONS RELATED TO ORDERED PAIRS OF FOURTHS, FIFTHS, SIXTHS, EIGHTHS), WITH ONE AS THE	NUMBERS, ED TO NUMERATOR IGHTH
0003045011	IDENTIFIES EQUIVALENT FRACTIONS USING VISUAL AIDS.	TIONS
0003045012	SHOW TWO-FOURTHS = ONE-HALF, ETC., BY THE USE OF	PHYSICAL F, FT
0003045013	SHOW TWO-FOURTHS = ONE-HALF, ETC., BY USE OF PICTURES.	F, ET
0003045014	RECOGNIZE GREATER THAN OR LESS THAN FOR THE FRACTIONS (NOTE THAT FRACTIONS IS BEING USED HERE FOR RATIONAL	ONE-FOURTH LESS NUMBERS). ING U
0003045015	ADD LIKE FRACTIONS WITH DENOMINATORS OF 2,3,4,5,6, OR 8 FRACTIONS.	WHERE BOTH NOMIN
0003045016	SOLVES WORD PROBLEMS INVOLVING FRACTIONS.	VING

REE-FOURTHS OF A WHOLE.

SIXTHS, AND EIGHTHS OF SETS OF OBJECTS.

(HALVES, THIRDS, FOURTHS, FIFTHS, SIXTHS, OR EIGHTHS) TO THE SHADED REGION OF A

L NUMBERS FOR INDICATING FIFTHS, SIXTHS, AND EIGHTHS.

MBERS FOR INDICATING FIFTHS, SIXTHS, AND EIGHTHS.

F, ONE-THIRD, ONE-FOURTH, ONE- FIFTH, ONE-SIXTH, AND/OR ONE-EIGHTH, THE STUDENT WILL
UIVALENT FRACTIONS FOR EACH.

ED TO ORDERED PAIRS OF NUMBERS, PARTS OF REGIONS AND SETS (HALVES, THIRDS,
IGHTHS), WITH ONE AS THE NUMERATOR AND WITH NUMERATOR GREATER THAN ONE.

TIONS USING VISUAL AIDS.

F, ETC., BY THE USE OF PHYSICAL OBJECTS.

F, ETC., BY USE OF PICTURES.

LESS THAN FOR THE FRACTIONS ONE-FOURTH, ONE-THIRD, ONE-HALF WITH PHYSICAL OBJECTS.
ING USED HERE FOR RATIONAL NUMBERS).

NOMINATORS OF 2,3,4,5,6, OR 8 WHERE BOTH OF THE ADDENDS AND THE SUM ARE PROPER

VING FRACTIONS.

0003050	GEOMETRY (COORDINATE SYSTEMS)	
0003050001	RECOGNIZE THAT A POINT ON A LINE CAN BE DESCRIBED BY A	NUMBER (COORDI
0003050002	USES COORDINATES (NUMBER PAIRS) TO DETERMINE LOCATIONS	ON A PLANE.
0003050003	GRAPHS GIVEN POINTS IN A PLANE.	
0003055	GEOMETRY (PLANE FIGURES) - ANGLES -	
0003055001	IDENTIFIES A RIGHT ANGLE.	
0003055002	NAMES A RIGHT ANGLE BY THREE POINTS.	
0003060	GEOMETRY (PLANE FIGURES) - CIRCLE -	
0003060001	DRAWS CIRCLE WITHOUT COMPASS.	
0003065	GEOMETRY (PLANE FIGURES) - CONGRUENCE -	
0003065001	RECOGNIZE CONGRUENT ANGLES.	
0003065002	RECOGNIZE THAT A RECTANGULAR SHEET OF PAPER CAN BE FOLDING.	DIVIDED INTO T
0003070	GEOMETRY (PLANE FIGURES) - CONSTRUCTIONS -	
0003070001	FINDS A MID-POINT.	

CAN BE DFSCRIBED BY A NUMBER (COORDINATE).

TO DETERMINE LOCATIONS ON A PLANE.

S -

NTS.

E -

UENCE -

ET OF PAPER CAN BE DIVIDED INTO TWO OR MORE CONGRUENT PARTS THROUGH

RUCTIONS -

0003070002	CONSTRUCTS A RIGHT ANGLE IN A CIRCLE.	N A C
0003080	GEOMETRY (PLANE FIGURES) - LINES -	LINE
0003080001	IDENTIFIES PARALLEL LINES.	
0003085	GEOMETRY (PLANE FIGURES) - OPEN/CLOSED FIGURES -	OPEN
0003085001	DESCRIBE A GIVEN GEOMETRIC FIGURE AS BEING OPEN OR CLOSED.	FIGU
0003085002	RECOGNIZE OBJECTS OR DRAWINGS THAT ARE TRIANGLES, QUADRILA	NGS T
0003090	GEOMETRY (PLANE FIGURES) - POLYGONS -	POLY
0003090001	IDENTIFIES PLANE GEOMETRIC FIGURES - TRAPEZOID, PENTAGON,	FIGU
0003090002	ASSOCIATES THE NUMBER OF SIDES OF A POLYGON WITH THE NUMBER OF	IDES
0003090003	FINDS THE SUM OF THE ANGLES OF A TRIANGLE AND A QUADRILA	S OF
0003090004	USES BASIC FIGURES OF GEOMETRY TO CONSTRUCT ANGLES, TRIANGLES	ETRY
0003095	GEOMETRY (PLANE FIGURES) - QUADRILATERALS -	QUAD
0003095001	FIND THE PERIMETER OF A RECTANGLE OR PARALLELOGRAM,	CTANG

N A CIRCLE.

LINES -

OPEN/CLOSED FIGURES -

FIGURE AS BEING OPEN OR CLOSED.

NGS THAT ARE TRIANGLES, QUADRILATERALS, AND CIRCLES.

POLYGONS -

FIGURES - TRAPEZOID, PENTAGON, AND OTHER REGULAR POLYGONS.

IDES OF A POLYGON WITH THE NUMBER OF DIAGONALS.

S OF A TRIANGLE AND A QUADRILATERAL USING VISUAL AIDS.

ETRY TO CONSTRUCT ANGLES, TRIANGLES, QUADRILATERALS, PARALLELOGRAMS.

QUADRILATERALS -

CT OR PARALLELOGRAM.

0003095002 RECOGNIZES THAT BY JOINING MID-POINTS OF A QUADRILATERAL (WITHOUT CROSS INTS

0003095003 GIVEN A PARALLELOGRAM MARKED OFF IN SQUARES, THE STUDENT WILL DETERMINE IN SQ

0003100 GEOMETRY (PLANE FIGURES) - SETS OF POINTS - F POI

0003100001 LOCATES GIVEN POINTS IN A PLANE.

0003100002 RECOGNIZE THAT MANY LINES MAY PASS THROUGH A POINT. S THR

0003100003 RECOGNIZE THAT THERE IS ONLY ONE LINE THROUGH TWO POINTS. LINE

0003100004 RECOGNIZE THAT TWO LINES CAN INTERSECT AT ONLY ONE POINT. RSECT

0003100005 RECOGNIZE RAYS AND ANGLES.

0003105 GEOMETRY (PLANE FIGURES) - SIMILARITY - RITY

0003105001 RECOGNIZE THAT FIGURES ARE SIMILAR IF THEY HAVE THE SAME SHAPE. FOR EX R IF

0003115 GEOMETRY (PLANE FIGURES) - SYMMETRY - RY -

0003115001 RECOGNIZE SYMMETRY WITH RESPECT TO A LINE BY FOLDING PAPER CONTAINI O A L
VERTICAL AXES OF SYMMETRY.

)INTS OF A QUADRILATERAL (WITHOUT CROSSING LINES) A PARALLELOGRAM IS FORMED.

IN SQUARES, THE STUDENT WILL DETERMINE THE NUMBER OF SQUARE UNITS.

)F POINTS -

S THROUGH A POINT.

LINE THROUGH TWO POINTS.

RSECT AT ONLY ONE POINT.

RITY -

R IF THEY HAVE THE SAME SHAPE. FOR EXAMPLE, ALL SQUARES ARE SIMILAR.

RY -

O A LINE BY FOLDING PAPER CONTAINING SYMMETRICAL FIGURES ALONG THEIR

DOCUMENT RESUME

ED 077 736 SE 016 296

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ABSTRACT

The coding system used to classify items in the Instructional Program Planning and Evaluation System (IPPES) Master Objectives Bank is explained. Objectives for 67 topics in mathematics are organized by grade level for each of the grades from kindergarten through six, and their code numbers are specified. (For a listing of objectives by topic, see SE 016 295.) This work was prepared under an ESEA Title III contract. (DT)

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I.P.P.E.S. MASTER OBJECTIVES MA

MATHEMATICS (K-6) CATAL EN

JACKSON PUBLIC SCHOOLS
INSTRUCTIONAL PROGRAM
PLANNING & EVALUATION SYSTEM
290 WEST MICHIGAN AVENUE
JACKSON, MICHIGAN 49201

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Funded under Title III, ESEA of 1965,
Michigan Department of Education Project Number 0621

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S MASTER OBJECTIVES BANK

L EMATICS (K-6) CATALOG

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ITEM CODE NUMBERS

Each item of the I.P.P.E.S. Master Objectives Bank is coded with a ten digit numeral. user to categorize a given objective or to locate a needed objective according to a number of

1. Subject matter major classification. Initially IPPES will provide objectives in fi and grammar, (c) science, (d) social studies, and (e) writing skills and written ex left to right) indicate subject matter:

   (a) 00XXXXXXXX = mathematics

   (b) 01XXXXXXXX = reading

   (c) 02XXXXXXXX = science

   (d) 03XXXXXXXX = social studies

   (e) 04XXXXXXXX = writing

2. Grade Level. The grade level at which an objective is normally or traditionally in into the third and fourth digits of the code number. The first issue of the catalo through grade six according to the following code:

   (a) XX00XXXXXX = kindergarten

   (b) XX01XXXXXX = first grade

   (c) XX02XXXXXX = second grade

   (d) XX03XXXXXX = third grade

   (e) XX04XXXXXX = fourth grade

   (f) XX05XXXXXX = fifth grade

   (g) XX06XXXXXX - sixth grade

3. Topic of Instructional Unit: The fifth, sixth, and seventh digits indicate the topi the objective. Each subject matter major classification may be divided into one thc The three digit numerals assigned to topics specific to this catalog are found on th the body of the catalog all objectives associated with a topic are grouped within gr and are associated with a seven digit number.

ITEM CODE NUMBERS

tives Bank is coded with a ten digit numeral. The system chosen makes it easy for any te a needed objective according to a number of factors:

Initially IPPES will provide objectives in five areas: (a) mathematics, (b) reading studies, and (e) writing skills and written expression. The first two digits (from er:

ics

udies

h an objective is normally or traditionally introduced into the curriculum is coded he code number. The first issue of the catalogs covers the grade span from kindergarten llowing code:

ten
de
ade
de
ade
de
de

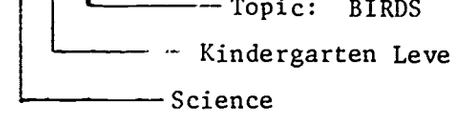
th, sixth, and seventh digits indicate the topic of the instructional unit covered by major classification may be divided into one thousand topics within each grade level. topics specific to this catalog are found on the following Topic Summary Sheet. Within s associated with a topic are grouped within grade levels. Topic headings are given number.

4. Objective Within Topic. A maximum of one thousand objectives may be grouped under [illegible] of on[illegible] eighth, ninth, and tenth digits of the code number indicate the objective within th[illegible]he [illegible]

SPECIFIC EXAMPLES OF CODING

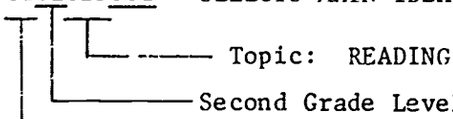
1. Science

0200060007 KNOW THE PARTS OF A CHICKEN EGG. (Seventh objective within topic) [illegible]CKE[illegible]



2. Reading

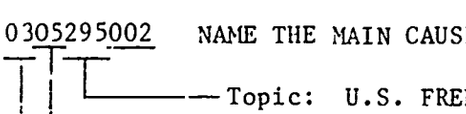
0102025001 SELECTS MAIN IDEA OF A PARAGRAPH. (First objective within topic) [illegible]PARA[illegible]



[illegible]EHEN[illegible]

3. Social Studies

0305295002 NAME THE MAIN CAUSES OF THE FRENCH AND INDIAN WAR. (Second objective w[illegible]F THI[illegible]



[illegible]ND [illegible]

of one thousand objectives may be grouped under one Instructional Unit Topic. The
the code number indicate the objective within the topic.

SPECIFIC EXAMPLES OF CODING

ICKEN EGG. (Seventh objective within topic)

PARAGRAPH. (First objective within topic)

REHENSION

THE FRENCH AND INDIAN WAR. (Second objective within topic)

ND INDIAN WAR.

MATHEMATICS TOPIC SUMMARY SHEET
Grades K-6

CODE	TOPIC	CODE
000	Absolute Value	170
005	Addition	175
010	Addition (Word Problems)	180
015	Bases	185
020	Clock (Module) Arithmetic	190
025	Decimals	195
030	Division	200
035	Estimation	205
040	Exponential Notation	210
045	Fractions	215
050	Geometry (Coordinate Systems)	220
055	Geometry (plane figures) - angles -	225
060	Geometry (plane figures) - circle -	230
065	Geometry (plane figures) - congruence -	235
070	Geometry (plane figures) - constructions -	240
075	Geometry (plane figures) - ellipse -	245
080	Geometry (plane figures) - lines -	250
085	Geometry (plane figures) - open/closed figures -	255
090	Geometry (plane figures) - polygons -	260
095	Geometry (plane figures) - quadrilaterals -	265
100	Geometry (plane figures) - sets of points -	270
105	Geometry (plane figures) - similarity -	275
110	Geometry (plane figures) - sumbols and notation -	280
115	Geometry (plane figures) - symmetry -	285
120	Geometry (plane figures) - terminology -	290
125	Geometry (plane figures) - triangle -	295
130	Geometry (Size and Shape)	300
135	Geometry (Solids)	305
140	Geometry (Space Relationships)	310
145	Graphs	315
150	Inverse (Additive)	320
155	Inverse (Multiplicative)	325
160	Mathematical Systems (Finite and Nonfinite)	330
165	Measurement (Area)	

MATHEMATICS TOPIC SUMMARY SHEET
Grades K-6

CODE	TOPIC
170	Measurement (Dry)
175	Measurement (Instruments)
180	Measurement (Linear)
185	Measurement (Liquid)
190	Measurement (Precision)
195	Measurement (Rate)
200	Measurement (Relative)
205	Measurement (Temperature)
210	Measurement (Time)
215	Measurement (Volume)
220	Multiplication
225	Number Sentences
230	Number Systems (Early)
235	Numbers (Integers)
240	Numbers (Prime - Composite)
245	Numbers (Rational and Irrational)
250	Numbers (whole)
255	Numerals
260	Patterns
265	Percentage
270	Place Value
275	Probability
280	Proportion
285	Ratio
290	Scientific Notation
295	Sets
300	Simplest Terms
305	Square Root
310	Statistics
315	Subtraction
320	Subtraction (Word Problems)
325	Value of Coins
330	Word Problem Solution Strategies

0000005	ADDITION	
0000005001	USING A PICTURE OF TWO SETS OF OBJECTS ADD TWO NUMBERS	WHERE THE S OF
0000005002	USING A NUMBER LINE, ADD TWO NUMBERS WHERE THE SUM IS 10 OR LESS.	WO N
0000005003	ADD TWO 1 DIGIT NUMBERS.	
0000005004	ADD TWO 1 DIGIT NUMBERS VERTICALLY AND/OR HORIZONTALLY	WHERE THE RTIC
0000060	GEOMETRY	
0000060001	GIVEN A MODEL OF A CIRCLE, IDENTIFY AND NAME THIS	GEOMETRIC IOF
0000095001	GIVEN A MODEL OF A SQUARE, IDENTIFY AND NAME THIS	GEOMETRIC IDF
0000095002	GIVEN A MODEL OF A RECTANGLE, IDENTIFY AND NAME THIS	GEOMETRIC LE,
0000125001	GIVEN A MODEL OF A TRIANGLE, IDENTIFY AND NAME THIS	GEOMETRIC E, I
0000135001	GIVEN SET OF SOLID SHAPES (CONES, PYRAMIDS) NAME AND	SORT THEM CON
0000135002	GIVEN A SET OF SOLID SHAPES OF CUBES, SPHERES, AND CATEGORIES.	CYLINDERS S OF
0000140001	USE THE TERMS INSIDE, OUTSIDE, AND ON AS RELATED TO	SOLID FIG IDE,
0000140002	INDICATE WHEN A GIVEN OBJECT IS BELOW, BESIDE AND	BETWEEN I CT I

S OF OBJECTS ADD TWO NUMBERS WHERE THE SUM IS 10 OR LESS.

O NUMBERS WHERE THE SUM IS 10 OR LESS.

RTICALLY AND/OR HORIZONTALLY WHERE THE SUM IS 10 OR LESS.

IDENTIFY AND NAME THIS GEOMETRIC FIGURE.

IDENTIFY AND NAME THIS GEOMETRIC FIGURE.

E, IDENTIFY AND NAME THIS GEOMETRIC FIGURE.

E, IDENTIFY AND NAME THIS GEOMETRIC FIGURE.

CONES, PYRAMIDS) NAME AND SORT THEM ACCORDING TO THEIR CATEGORIES.

S OF CUBES, SPHERES, AND CYLINDERS, NAME AND SORT THEM ACCORDING TO THEIR

IDE, AND ON AS RELATED TO SOLID FIGURES.

CT IS BELOW, BESIDE AND BETWEEN IN RELATIONSHIP TO ONE OR MORE OTHER OBJECTS.

0000175	MEASUREMENT	
0000175001	DEFINE CALENDAR.	
0000175002	DEFINE CLOCK.	
0000175003	DEFINE THERMOMETER.	
0000180001	DEFINE RULER.	
0000200001	USE APPROPRIATELY SUCH WORDS AS LONGER, SHORTER,	HEAVIER, LIGH
0000210001	TELL THE NAME OF THE MONTH AND THE DAY OF THE WEEK.	
0000210002	MAKE COMPARISONS IN TIME AND COUNT WHOLE UNITS OF TIME	(DAY, WEEK, MO
0000255	NUMERALS	
0000255001	KNOW THAT A NUMBER IS AN IDEA.	
0000255002	GIVEN SETS OF ELEMENTS (PICTURE OR CONCRETE) SOME OF AND IDENTIFY NUMERAL 0 AS REPRESENTING THE NUMBER OF THE	WHICH ARE EMPT SET.
0000255003	GIVEN SETS OF ELEMENTS (PICTURES OR CONCRETE) SOME OF CONTAIN ONE MEMBER EACH AND IDENTIFY NUMERAL 1 AS	WHICH HAVE CAR REPRESENTING T
0000255004	GIVEN SETS OF ELEMENTS (PICTURES OR CONCRETE) SOME OF WHICH CONTAIN TWO MEMBERS EACH AND IDENTIFY THE NUMERAL	WHICH HAVE THE 2 AS REPRESENT
0000255005	GIVEN SETS OF ELEMENTS (PICTURES OR CONCRETE) SOME OF WHICH CONTAIN THREE MEMBERS EACH AND IDENTIFY NUMERAL	WHICH HAVE THE 3 AS REPRESENT
0000255006	GIVEN SETS OF ELEMENTS (PICTURES OR CONCRETE) SOME OF WHICH CONTAIN FOUR MEMBERS EACH AND IDENTIFY NUMERAL 4	WHICH HAVE THE AS REPRESENTIN

LONGER, SHORTER,	HEAVIER, LIGHTER, LOWER, LARGER, SMALLER.
THE DAY OF THE WEEK.	
UNT WHOLE UNITS OF TIME	(DAY, WEEK, MONTH, YEAR).
OR CONCRETE) SOME OF SENTING THE NUMBER OF THE	WHICH ARE EMPTY SETS, LOCATE THE SETS WHICH ARE EMPTY SET.
S OR CONCRETE) SOME OF NTIFY NUMERAL 1 AS	WHICH HAVE CARDINAL NUMBER OF ONE, LOCATE THE SETS WHICH REPRESENTING THE MEMBER.
S OR CONCRETE) SOME OF AND IDENTIFY THE NUMERAL	WHICH HAVE THE CARDINAL NUMBER OF TWO. LOCATE THE SETS 2 AS REPRESENTING THE NUMBER OF THE SET.
S OR CONCRETE) SOME OF H AND IDENTIFY NUMERAL	WHICH HAVE THE CARDINAL NUMBER OF THREE, LOCATE THE SETS 3 AS REPRESENTING THE NUMBER OF THE SET.
S OR CONCRETE) SOME OF AND IDENTIFY NUMERAL 4	WHICH HAVE THE CARDINAL NUMBER OF FOUR, LOCATE THE SETS AS REPRESENTING THE NUMBER OF THE SETS.

0000255007	GIVEN SETS OF ELEMENTS (PICTURE OR CONCRETE) SOME OF WHICH CONTAINS FIVE MEMBERS EACH AND IDENTIFY NUMERAL 5	WHICH HA TURE AS REPRF EACH
0000255008	GIVEN SETS OF ELEMENTS (PICTURES OR CONCRETE) SOME OF WHICH CONTAIN SIX MEMBERS EACH AND IDENTIFY NUMERAL 6	WHICH HA TURES AS REPRE ACH
0000255009	GIVEN SETS OF ELEMENTS (PICTURES OR CONCRETE) SOME OF WHICH CONTAIN SEVEN MEMBERS EACH AND IDENTIFY NUMERAL 7	WHICH HA TURES AS REPRE EACH
0000255010	GIVEN SETS OF ELEMENTS (PICTURES OR CONCRETE) SOME OF WHICH CONTAIN EIGHT MEMBERS EACH AND IDENTIFY NUMERAL 8	WHICH HA TURES AS REPRE EACH
0000255011	GIVEN SETS OF ELEMENTS (PICTURES OR CONCRETE) SOME OF WHICH CONTAIN NINE MEMBERS EACH AND IDENTIFY NUMERAL 9	WHICH HA TURES AS REPRE EACH
0000255012	GIVEN SETS OF ELEMENTS (PICTURES OR CONCRETE) SOME OF WHICH CONTAIN TEN MEMBERS EACH AND IDENTIFY NUMERAL 10	WHICH HA TURES AS REPRE ACH
0000255013	IDENTIFY THE NUMERALS 0 THROUGH 9.	OUGH
0000255014	GIVEN A GROUP OF NO MORE THAN 10 OBJECTS, COUNT THE	OBJECTS. AN 1
0000255015	GIVEN A POINT ON A NUMBER LINE, WRITE THE CORRESPONDING	NUMBER FR INE,
0000255016	GIVEN A SET OF NUMERAL FLASH CARDS, 0 THROUGH 10,	ARRANGE H CA
0000255017	PROVIDED WITH PROPER MATERIALS, SUCH AS, PENCIL, PAPER,	OR CHALK ALS,
0000255018	MATCH THE WORD FORMS OF THE NUMBERS 0-10 WITH THE	CORRECT N NUM
0000255019	COUNT ORALLY BY MATCHING NUMERALS WITH SETS HAVING A	GIVEN NUM MERA
0000255020	SELECT THE SET OF OBJECTS ASSOCIATED WITH A GIVEN	NUMBER. SSOC

TURE OR CONCRETE; SOME OF EACH AND IDENTIFY NUMERAL 5	WHICH HAVE THE CARDINAL NUMBER OF FIVE, LOCATE THE SET AS REPRESENTING THE NUMBER OF THE SET.
TURES OR CONCRETE) SOME OF ACH AND IDENTIFY NUMERAL 6	WHICH HAVE THE CARDINAL NUMBER OF SIX, LOCATE THE SETS AS REPRESENTING THE NUMBER OF THE SET.
TURES OR CONCRETE) SOME OF EACH AND IDENTIFY NUMERAL 7	WHICH HAVE THE CARDINAL NUMBER OF SEVEN, LOCATE THE SET AS REPRESENTING THE NUMBER OF THE SET.
TURES OR CONCRETE) SOME OF FACH AND IDENTIFY NUMERAL 8	WHICH HAVE THE CARDINAL NUMBER OF EIGHT, LOCATE THE SET AS REPRESENTING THE NUMBER OF THE SET.
TURES OR CONCRETE) SOME OF EACH AND IDENTIFY NUMERAL 9	WHICH HAVE THE CARDINAL NUMBER OF NINE LOCATE THE SETS AS REPRESENTING THE NUMBER OF THE SET.
TURES OR CONCRETE) SOME OF ACH AND IDENTIFY NUMERAL 10	WHICH HAVE THE CARDINAL NUMBER OF TEN, LOCATE THE SETS AS REPRESENTING THE NUMBER OF THE SET.
OUGH 9.	
AN 10 OBJECTS, COUNT THE	OBJECTS.
INE, WRITE THE CORRESPONDING	NUMBER FROM 0-10 FOR THE POINT.
H CARDS, 0 THROUGH 10,	ARRANGE THEM IN THE CORRECT SEQUENCE.
ALS, SUCH AS, PENCIL, PAPER,	OR CHALK, CORRECTLY WRITE THE NUMERALS 0 THROUGH 10.
NUMBERS 0-10 WITH THE	CORRECT NUMERALS.
MERALS WITH SETS HAVING A	GIVEN NUMBER OF OBJECTS.
SSOCIATED WITH A GIVEN	NUMBER.

0000255021 WRITE THE NUMERAL FOR A GIVEN SET OF 0-10 OBJECTS.

0000255022 COUNT MEMBERS OF SETS IN THEIR PROPER ORDER THROUGH 10.

0000255023 GIVEN TEN NON-EQUIVALENT SETS, ARRANGE THE SETS IN ORDER.

0000255024 GIVEN GROUPS OF OBJECTS (NO MORE THAN 10) ORGANIZE FROM LARGEST TO SM

0000255025 GIVEN TWO NUMBERS (VERBAL OR SETS OF OBJECTS OR PICTURES) SUC
SAYING SEVEN IS GREATER THAN THREE OR THREE IS LESS THAN SEVEN.

0000255026 GIVEN A SEQUENCE OF OBJECTS, PEOPLE, ETC, IDENTIFY THE ORDINAL NUMBE

0000255027 IN RANDOM ORDER, SHOW WHICH OBJECT IS FIRST TO FIFTH IN A GIVEN SE

0000255028 COUNT OBJECTS FROM 0-100 ORALLY.

0000255029 COUNT ORALLY BY STEPS TO 100.

0000260 PATTERNS

0000260001 COPY A GIVEN PATTERN OF OBJECTS OR SHAPES.

0000260002 GIVEN A SERIES OF OBJECTS OR SHAPES IN A PATTERN, DESCRIBE THE

0000260003 GIVEN A SIMPLE PATTERN, SUCH AS A TRIANGLE, A SQUARE, AND A TRIANGL

0000260004 AFTER SEEING A GIVEN PATTERN OF OBJECTS THAT HAS NO MORE THAN THREE PA
OF OBJECTS.

SET OF 0-10 OBJECTS.

PROPER ORDER THROUGH 10.

ARRANGE THE SETS IN ORDER.

RE THAN 10) ORGANIZE FROM LARGEST TO SMALLEST AND SMALLEST TO LARGEST.

TS OF OBJECTS OR PICTURES) SUCH AS SEVEN AND THREE, ORDER THEM BY
THREE OR THREE IS LESS THAN SEVEN.

OPLE, ETC. IDENTIFY THE ORDINAL NUMBER IN THE SEQUENCE.

ECT IS FIRST TO FIFTH IN A GIVEN SET OF OBJECTS ARRANGED IN A ROW.

.

S OR SHAPES.

APES IN A PATTERN, DESCRIBE THE NEXT STEP OF THE PATTERN.

A TRIANGLE, A SQUARE, AND A TRIANGLE, EXTEND THE PATTERN.

TS THAT HAS NO MORE THAN THREE PARTS, REPRODUCE FROM MEMORY THE SAME PATTERN

0000270	PLACE VALUE	
0000270001	RECOGNIZE THE NUMBER OF TENS AND THE NUMBER OF ONES IN A GIVEN 2 D	S AN
0000295	SETS	
0000295001	KNOW THAT A SET IS AN AGGREGATE, GROUP OR COLLECTION OF	OBJECTS C GATE
0000295002	KNOW THAT A SET MAY BE IDENTIFIED EITHER BY LISTING OR	DESCRIBIN TIFI
0000295003	GIVEN A GROUP OF OBJECTS WITH ONE OBJECT DIFFERENT FROM	THE REST, TH O
0000295004	RECOGNIZE THE SMALLEST OR LARGEST OBJECT IN A GROUP OF	OBJECTS. ARGE
0000295005	GIVEN A GROUP OF OBJECTS, RECOGNIZE THOSE THAT ARE THE ARE THE SAME COLOR.	SAME SIZE ECOG
0000295006	GIVEN A SET OF OBJECTS, COMPARE THEM AND IDENTIFY AND	NAME THE PARE
0000295007	RECOGNIZE THE SIMILARITIES OF GIVEN OBJECTS: SIZE,	WEIGHT, P OF G
0000295008	GIVEN AN OBJECT, IDENTIFY ITS POSITION IN RELATION TO MARK PICTURES ACCORDING TO DIRECTIONS GIVEN BY THE	ANOTHER O TEACHER. TS P DIRE
0000295009	GIVEN SETS OF PICTURES DEPICTING DIFFERENCES IN SIZE AS PICTURE ACCORDING TO DIRECTIONS GIVEN BY THE TEACHER.	LONGER, S CTIN IONS
0000295010	GIVEN A VERBAL DESCRIPTION OF A SET, DISTINGUISH BETWEEN	MEMBERS O OF A
0000295011	THE SET THAT CONTAINS NO MEMBERS IS CALLED THE EMPTY	SET. MBER
0000295012	GIVEN PAIRS OF SETS, COMPARE THE SETS BY VISUAL TO DIRECTIONS GIVEN BY THE TEACHER.	INSPECTIO THE EACH

S AND THE NUMBER OF ONES IN A GIVEN 2 DIGIT NUMBER.

GATE, GROUP OR COLLECTION OF OBJECTS OR IDEAS THAT WE WISH TO TREAT TOGETHER.

TIFIED EITHER BY LISTING OR DESCRIBING ITS MEMBERS.

TH ONE OBJECT DIFFERENT FROM THE REST, RECOGNIZE THE OBJECT THAT IS DIFFERENT.

ARGEST OBJECT IN A GROUP OF OBJECTS.

ECOGNIZE THOSE THAT ARE THE SAME SIZE, THOSE THAT ARE THE SAME SHAPE, OR THOSE THAT

PARE THEM AND IDENTIFY AND NAME THE HEAVIEST AND LIGHTEST.

DF GIVEN OBJECTS: SIZE, WEIGHT, POSITION, COLOR, SHAPE, COMPOSITION, USE.

TS POSITION IN RELATION TO ANOTHER OBJECT (IN, ON, OVER, UNDER, BESIDE) AND WILL
DIRECTIONS GIVEN BY THE TEACHER.

CTING DIFFERENCES IN SIZE AS LONGER, SHORTER, TALLER, LARGER, SMALLER, MARK THE
IONS GIVEN BY THE TEACHER.

DF A SET, DISTINGUISH BETWEEN MEMBERS OF THE SET AND THINGS WHICH ARE NOT MEMBERS.

HBERS IS CALLED THE EMPTY SET.

THE SETS BY VISUAL INSPECTION AND FIND THE LARGER OR SMALLER SET ACCORDING
EACHER.

0000295013	USE SUCH TERMS AS MORE T'AN, AS MANY AS, FEWER THAN	WHEN COMPARING
0000295014	TWO SETS THAT CONTAIN THE SAMF MEMBERS ARF SAID TO BE	EQUAL.
0000295015	GIVEN TWO EQUIVALENT SETS (OBJECTS OR PICTURES) THROUGH	ONE-TO-ONE MAT
0000295016	GIVEN TWO NON-EQUIVALENT SETS (OBJECTS OR PICTURES).	THROUGH ONE-TO
	EQUIVALENT.	
0000295017	UTILIZE THE IDEA ONE MORE THAN IN ORGANIZING SETS IN	THE NATURAL OR
0000295018	IDENTIFY, WITHOUT COUNTING, THE NUMBER OF SETS WITH TWO,	THREE, OR FOUR
0000295019	COMPARE TWO NON-MATCHING SETS OF FEWER THAN 10 OBJECTS	AND DECIDE WHI
	HAS FEWER MEMBERS.	
0000295020	DETERMINE WHETHER TWO SETS ARE EQUIVALENT (CAN BE	MATCHED OR PLA
0000295021	IDENTIFY TWO EQUIVALENT SETS BY PLACING THE MEMBERS OF	THE SET IN ONE
0000295022	DETERMINE THAT 3 IS GREATER THAN 2 AND THAT 2 IS LESS	THAN 3 BY COMP
	THIS FOR ANY TWO NUMBERS LESS THAN 6.	
0000295023	REARRANGE SETS OF OBJECTS TO DEMONSTRATE THE JOINING OF	SETS, AND THFR
0000295024	GIVEN TWO SETS, JOIN THE TWO SETS AND GET A THIRD SET.	
0000295025	DEMONSTRATE IF YOU JOIN A SET OF ONE ELEMENT TO A SET	CONTAINING TWO
	SET OF TWO ELEMENTS WITH A SET OF ONE ELEMENT.	
0000295026	GIVEN A SET OF ELEMENTS, REMOVE A SET AND GET A	REMAINING SET.

MANY AS, FEWER THAN	WHEN COMPARING SETS OF OBJECTS.
EMBERS ARE SAID TO BE	EQUAL.
TS OR PICTURES) THROUGH	ONE-TO-ONE MATCHING, IDENTIFY THE SETS AS EQUIVALENT.
BJECTS OR PICTURES)	THROUGH ONE-TO-ONE MATCHING, IDENTIFY THE SETS AS NON-
IN ORGANIZING SETS IN	THE NATURAL ORDER.
NUMBER OF SETS WITH TWO,	THREE, OR FOUR OBJECTS.
FEWER THAN 10 OBJECTS	AND DECIDE WHICH SET HAS MORE MEMBERS AND WHICH SET
QUIVALENT (CAN BE	MATCHED OR PLACED IN A ONE-TO-ONE CORRESPONDENCE).
PLACING THE MEMBERS OF	THE SET IN ONE-TO-ONE CORRESPONDENCE.
2 AND THAT 2 IS LESS AN 6.	THAN 3 BY COMPARING APPROPRIATE SETS OF OBJECTS AND DO
ONSTRATE THE JOINING OF	SETS, AND THEREBY DEVELOP A READINESS FOR ADDITION.
S AND GET A THIRD SET.	
ONE ELEMENT TO A SET F ONE ELEMENT.	CONTAINING TWO ELEMENTS, IT IS THE SAME AS JOINING A
A SET AND GET A	REMAINING SET.

0000295027	SOLVE SIMPLE ADDITION PROBLEMS WHERE THE SUM OF THE THE ORALLY PROPOSED PROBLEM. COUNTERS MAY BE USED.	PARTS IS
0000295028	GIVEN A SET OF 10 OBJECTS, CONTAINING TWO OR MORE ORALLY.	SUBSETS,
0000295029	GIVEN MORE THAN ONE SUBSET, COMBINE SUBSETS AND ORALLY PRODUCES: TO 10.	INDICATE
0000295030	REARRANGE SETS OF OBJECTS TO DEMONSTRATE THE SEPARATING	OF SETS,
0000295031	SOLVE SIMPLE SUBTRACTION PROBLEMS BY USING COUNTERS INDICATE THE ANSWER TO THE ORALLY PROPOSED PROBLEMS.	WHEN THE

0000315	SUBTRACTION	
0000315001	WITH A PICTURE OF TWO SETS OF OBJECTS, SUBTRACT A 1	DIGIT NU
0000315002	WITH A NUMBER LINE, SUBTRACT A 1 DIGIT NUMBER FROM A	LARGER 1

0000325	VALUE OF COINS	
0000325001	RECOGNIZE PENNIES, NICKELS, DIMES.	
0000325002	IDENTIFY A PENNY, NICKEL, DIME AND TELL THE VALUE OF	EACH.
0000325003	FIND THE VALUE OF A GIVEN GROUP OF PENNIES, NICKELS, AND DIMES TH	

EMS WHERE THE SUM OF THE PARTS IS 5 OR LESS BY ORALLY INDICATING THE ANSWER TO
COUNTERS MAY BE USED.

CONTAINING TWO OR MORE SUBSETS, IDENTIFY THE NUMBER OF SUBSETS WITHIN THE SET

COMBINE SUBSETS AND ORALLY INDICATE HOW MANY THE COMBINATION OF THE SUBSETS

C DEMONSTRATE THE SEPARATING OF SETS, THEREBY DEVELOPING A READINESS FOR SUBTRACTION.

OBLEMS BY USING COUNTERS WHEN THE PARTS OF THE WHOLE EQUAL 5 OR LESS. ORALLY
ORALLY PROPOSED PROBLEMS.

OF OBJECTS, SUBTRACT A 1 DIGIT NUMBER FROM A LARGER 1 DIGIT NUMBER.

T A 1 DIGIT NUMBER FROM A LARGER 1 DIGIT NUMBER.

DIMES.

IME AND TELL THE VALUE OF EACH.

ROUP OF PENNIES, NICKELS, AND DIMES THAT TOTAL LESS THAN $1.00.

0001005	ADDITION
0001005001	IDENTIFIES THE ADDITIVE PROPERTY OF 0.
0001005002	MANIPULATES OBJECTS TO ILLUSTRATE ADDITION FACTS THROUGH 5.
0001005003	SELECTS OTHER NAMES FOR NUMBERS BY MATCHING ADDITION EXPRESSIONS W
0001005004	IDENTIFIES CARDINAL NUMBER IN EACH OF TWO SETS TOGETHER THROUGH 5.
0001005005	STUDENT SUPPLIES THE SYMBOLS FOR PLUS (+), AND EQUAL TO (=) TO REPLAC
0001005006	IDENTIFIES EQUAL SIGN (=) AND ITS MEANING WHEN USED IN AN EQUATION.
0001005007	USE THE SYMBOLS +, AND = TO FORM SENTENCES SUCH AS 3 + 6 = 9.
0001005008	SOLVES EQUATIONS OF SUMS TO 5 (FIRST HORIZONTAL; THEN VERTICAL).
0001005009	MANIPULATES OBJECTS TO ILLUSTRATE ADDITION FACTS 6-9.
0001005010	SELECTS OTHER NAMES FOR NUMBERS BY MATCHING ADDITION EXPRESSIONS W
0001005011	IDENTIFIES CARDINAL NUMBER IN EACH OF TWO SETS AND IN BOTH SETS TOG
0001005012	SOLVES EQUATIONS OF SUMS (6-9); (FIRST HORIZONTAL; THEN VERTICAL
0001005013	MANIPULATES OBJECTS TO ILLUSTRATE COMBINATIONS OF TEN.
0001005014	SELECTS OTHER NAMES FOR 10 WITH PICTURE GROUPS OR NUMERALS.

Y OF 0.

TE ADDITION FACTS THROUGH 5.

S BY MATCHING ADDITION EXPRESSIONS WITH PICTURED GROUPS OF NUMERALS TO 5.

ACH OF TWO SETS TOGETHER THROUGH 5.

R PLUS (+), AND EQUAL TO (=) TO REPLACE THE WORDS IN A NUMBER SENTENCE.

TS MEANING WHEN USED IN AN EQUATION.

M SENTENCES SUCH AS 3 + 6 = 9.

FIRST HORIZONTAL; THEN VERTICAL).

TE ADDITION FACTS 6-9.

S BY MATCHING ADDITION EXPRESSIONS WITH PICTURED GROUPS OR NUMERALS 6-9.

ACH OF TWO SETS AND IN BOTH SETS TOGETHER EQUALING 6-9.

(FIRST HORIZONTAL; THEN VERTICAL).

TE COMBINATIONS OF TEN.

TH PICTURE GROUPS OR NUMERALS.

0001005015	IDENTIFIES CARDINAL NUMBER IN EACH OF TWO SETS AND IN	BOTH SET
0001005016	USE THE ADDITION FACTS THROUGH THE SUM OF 10.	
0001005017	FILLS IN MISSING ADDENDS FROM EQUATIONS WITH SUMS OF 10.	
0001005018	SOLVES EQUATIONS WITH SUM OF 10; (FIRST HORIZONTAL;	THEN VER
0001005019	RECOGNIZE EXAMPLES OF THE COMMUTATIVE PROPERTY FOR	ADDITION
0001005020	GIVEN AN ADDITION EQUATION, WRITES OR COMPLETES A FOR ADDITION: TO 10.	SECOND E
0001005021	FILLS IN NUMBERS (MISSING SUMS) TO MAKE TRUE NUMBER	SENTENCES
0001005022	WRITES = SIGN TO IDENTIFY TRUE STATEMENTS. CREATES TRUE NUMBER SE	
0001005023	IDENTIFIES AN UNKNOWN COMBINATION GREATER THAN 10,	USING A K
0001005024	GIVEN NUMBER SENTENCES, SUMS TO 12, STUDENT ILLUSTRATES	ELEMENT O
0001005025	GIVEN ANY NUMBER TO 12, STUDENT NAMES THAT NUMBER IN	ALL POSSI
0001005026	STUDENT USES HORIZONTAL AND VERTICAL ALGORISMS TO SOLVE	PROBLEMS
0001005027	GIVEN NUMBER SENTENCES WITH SUMS TO 12, THE STUDENT WILL ILLUSTRAT	
0001005028	IDENTIFIES THE USE OF PARENTHESES IN ADDITION EQUATIONS	CONTAININ

IN EACH OF TWO SETS AND IN	BOTH SETS TOGETHER EQUALING 10.
UGH THE SUM OF 10.	
UM EQUATIONS WITH SUMS OF 10.	
F 10; (FIRST HORIZONTAL;	THEN VERTICAL).
OMMUTATIVE PROPERTY FOR	ADDITION IN THE SET OF WHOLE NUMBERS.
WRITES OR COMPLETES A	SECOND EQUATION TO ILLUSTRATE THE COMMUTATIVE PRINCIPLE
UMS) TO MAKE TRUE NUMBER	SENTENCES FOR PICTURED ADDITION SITUATIONS.
RUE STATEMENTS. CREATES TRUE	NUMBER SENTENCES, CHANGING ONLY ONE NUMBER. SUMS TO 10.
NATION GREATER THAN 10.	USING A KNOWN COMBINATION.
S TO 12, STUDENT ILLUSTRATES	ELEMENT OF IDENTITY 0.
DENT NAMES THAT NUMBER IN	ALL POSSIBLE ADDITION COMBINATIONS.
VERTICAL ALGORISMS TO SOLVE	PROBLEMS OF ADDITION SUMS TO 12.
SUMS TO 12, THE STUDENT WILL	ILLUSTRATE THE COMMUTATIVE PROPERTY.
THESES IN ADDITION EQUATIONS	CONTAINING MORE THAN TWO ADDENDS.

0001005029 IDENTIFIES SUMS OF 3 ADDENDS; (FIRST HORIZONTAL; THEN VERTICAL).

0001005030 SOLVES ONE-STEP WORD PROBLEMS WITH PICTURES: TO 10.

0001010 ADDITION (WORD PROBLEMS)

0001010001 SOLVE WORD PROBLEMS IN WHICH TWO 1 DIGIT NUMBERS ARE ADDED AND THE

0001010002 SOLVE WORD PROBLEMS INVOLVING ADDITION OF TWO 2 DIGIT NUMERALS.

0001045 FRACTIONS

0001045001 USES CORRECTLY AND RESPONDS TO USE OF TERMS WHOLE AND ONE-HALF IN

0001045002 STUDENT IDENTIFIES ONE-HALF OF ANY SYMMETRICAL OBJECT.

0001045003 IDENTIFIES ONE-HALF OF A SET OF OBJECTS. LIMIT OF 12.

0001045004 DEMONSTRATE ONE-HALF, ONE-FOURTH, OF A PHYSICAL UNIT.

0001045005 DIVIDES SET OF OBJECTS INTO ONE-HALF, ONE-THIRD, ONE-FOURTH.

0001045006 DIVIDES OBJECTS INTO ONE-HALF, ONE-THIRD, ONE-FOURTH.

01050 GEOMETRY (COORDINATE SYSTEMS)

(FIRST HORIZONTAL; THEN VERTICAL).

ITH PICTURES: TO 10.

O 1 DIGIT NUMBERS ARE ADDED AND THE SUM IS TEN OR LESS.

DDITION OF TWO 2 DIGIT NUMERALS.

USE OF TERMS WHOLE AND ONE-HALF IN REFERENCE TO SETS OF OBJECTS.

ANY SYMMETRICAL OBJECT.

OBJECTS. LIMIT OF 12.

H, OF A PHYSICAL UNIT.

-HALF, ONE-THIRD, ONE- FOURTH.

ONE-THIRD, ONE-FOURTH.

0001050001	USE THE NUMBER LINE TO ILLUSTRATE ADDITION AND	SUBTRACT LUST
0001060	GEOMEYRY (PLANE FIGURES) - CIRCLE -	CI
0001060001	IDENTIFY CIRCLE.	
0001060002	REPRODUCE CIRCLE FROM MEMORY.	ORY.
0001075	GEOMETRY (PLANE FIGURES) - ELIPSE -	EL
0001075001	IDENTIFY ELLIPSE.	
0001095	GEOMETRY (PLANE FIGURES) - QUADRILATERALS -	QU
0001095001	IDENTIFY RECTANGLE.	
0001095002	REPRODUCE RECTANGLE FROM MEMORY.	EMO
0001095003	IDENTIFY SQUARE.	
0001095004	REPRODUCE SQUARE FROM MEMORY.	ORY.
0001125	GEOMETRY (PLANE FIGURES) - TRIANGLE -	TR
0001125001	REPRODUCE TRIANGLE FROM MEMORY.	MOR

LUSTRATE ADDITION AND SUBTRACTION PROBLEMS.

CIRCLE -

ORY.

ELIPSE -

QUADRILATERALS -

EMORY.

ORY.

TRIANGLE -

MERIC

0001130	GEOMETRY (SIZE AND SHAPE)	
0001130001	USE THE TERMS ROUND, FACE, EDGE, CORNER AND SURFACE.	CO
0001130002	OBSERVE DISTINGUISHING FEATURES OF SPHERES, RECTANGULAR PRISMS (BOXES	OF
0001140	GEOMETRY (SPACE RELATIONSHIPS)	
0001140001	NAME THE SETS OF POINTS INSIDE, ON, OR OUTSIDE A SIMPLE CLOSED CURVE.	ON,
0001140002	RECOGNIZE PHYSICAL REPRESENTATIONS OF POINTS, LINE SEGMENTS, AND	NS
0001170	MEASUREMENT (DRY)	
0001170001	IDENTIFIES DOZEN AND HALF DOZEN OBJECTS.	OBJ
0001175	MEASUREMENT (INSTRUMENTS)	
0001175001	IDENTIFY VARIOUS INSTRUMENTS OF MEASUREMENT OF TIME, TEMPERATURE, THERMOMETERS, SCALES, RULERS.	MEA
0001180	MEASUREMENT (LINEAR)	
0001180001	USE NON-STANDARD UNITS OF LINEAR MEASURE AND LIQUID MEASURE, SUCH PAPER CUP FOR LIQUID MEASURE.	ME
0001180002	RECOGNIZES USE OF RULER AND YARDSTICK IN INCHES AND FEET.	STI
0001180003	DETERMINE WHICH OF TWO LINE SEGMENTS IS THE LONGER OR THE SHORTER,	ENT

CORNER AND SURFACE.

OF SPHERES, RECTANGULAR PRISMS (BOXES), CYLINDERS, AND OTHER OBJECTS.

ON, OR OUTSIDE A SIMPLE CLOSED CURVE.

NS OF POINTS, LINE SEGMENTS, AND PORTIONS OF A PLANE (FLAT SURFACES).

OBJECTS.

MEASUREMENT OF TIME, TEMPERATURE, WEIGHT, AND LENGTH, SUCH AS CLOCKS,

MEASURE AND LIQUID MEASURE, SUCH A PENCIL OR BOOK FOR LENGTH, AND A

STICK IN INCHES AND FEET.

ENTS IS THE LONGER OR THE SHORTER, OR WHETHER THEY ARE THE SAME LENGTH.

0001180004	FINDS THE INCH MEASURE OF A LINE SEGMENT.	LIN
0001185	MEASUREMENT (LIQUID)	
0001185001	DEVELOP AN UNDERSTANDING OF GALLON, HALF-GALLON, AS	UNITS OF GAL
0001185002	MEASURES WITH CUPS, PINTS, QUARTS.	QUAR
0001200	MEASUREMENT (RELATIVE)	
0001200001	USES CONCRETE OBJECTS AND PICTURES TO COMPARE SIZE,	HEIGHT, ICTU
0001210	MEASUREMENT (TIME)	
0001210001	IS ABLE TO READ CALENDAR.	
0001210002	IDENTIFIES NUMBER OF DAYS IN WEEK, MONTH, YEAR.	N WE
0001210003	KNOWS TIME PERIODS - HOUR, DAY, WEEK, MONTH.	DAY,
0001210004	READS NUMERALS TO 12 ON CLOCK FACE ORALLY.	CK F
0001210005	WRITE NUMERALS TO 12 ON CLOCK FACE.	CK F
0001210006	IDENTIFIES AND DEMONSTRATES HOUR AND HALF HOUR.	HOU

LINE SEGMENT.

GALLON, HALF-GALLON, AS UNITS OF LIQUID MEASUREMENT.

QUARTS.

ICTURES TO COMPARE SIZE, HEIGHT, LENGTH, AND SIZE POSITION.

N WEEK, MONTH, YEAR.

DAY, WEEK, MONTH.

CK FACE ORALLY.

CK FACE.

H[illegible] ND HALF HOUR.

ERIC

0001210007	TELL TIME TO THE NEAREST HALF-HOUR.	HOUR
0001210008	DEMONSTRATE AN UNDERSTANDING OF TELLING TIME BY SETTING QUARTER HOUR.	THE HANDS OF F TE
0001210009	RECOGNIZE THE WRITTEN TIME (HOUR, HALF HOUR, QUARTER FACE.	HOUR AND FIVE UR,
0001225	NUMBER SENTENCES	
0001225001	PLACES GREATER THAN SYMBOL OR LESS THAN SYMBOL BETWEEN STRUCTURED GROUPS TO 9.	TWO NUMBERS T LESS
0001225002	THE STUDENT WILL INSERT THE SYMBOLS FOR LESS THAN AND	GREATER THAN MBOL
0001225003	DEMONSTRATE WITH SETS OF OBJECTS THE RELATIONSHIP 6 - 4 = 2.	BETWEEN SUCH S TS T
0001225004	FIND THE SOLUTION FOR SENTENCES LIKE 3 + 4 = X AND 5	- 2 = X. CES
0001225005	WRITE AN APPROPRIATE MATHEMATICAL SENTENCE LIKE 3 + 4 = PROBLEM SUGGESTS THE OPERATION OF ADDITION.	X FOR A PHYSI CAL OF
0001225006	MAKE UP A PROBLEM SITUATION TO FIT A GIVEN MATHEMATICAL	SENTENCE INVO FIT
0001225007	WRITE AN APPROPRIATE MATHEMATICAL SENTENCE FOR A STORY	PROBLEM WHERE CAL
0001225008	WRITE A NUMBER SENTENCE FOR A GIVEN PICTURED ADDITION	OR SUBTRACTIO GIVE
0001225009	MAKE UP PROBLEMS FOR GIVEN MATHEMATICAL SENTENCES USING	SUBTRACTION. HEMA
01225010	FIND SOLUTIONS FOR SENTENCES LIKE X + Y = 7 IN WHICH	MANY CORRECT S IKE

HOUR.	
F TELLING TIME BY SETTING	THE HANDS OF A CLOCK TO A GIVEN HOUR, HALF HOUR, AND
UR, HALF HOUR, QUARTER	HOUR AND FIVE MINUTES) REPRESENTED ON A GIVEN CLOCK
LESS THAN SYMBOL BETWEEN	TWO NUMBERS TO INDICATE THE GREATER OR LESSER WITHOUT
MBOLS FOR LESS THAN AND	GREATER THAN WHEN COMPARING CARDINAL NUMBERS.
TS THE RELATIONSHIP	BETWEEN SUCH SENTENCES AS 4 + 2 = 6, 6 - 2 = 4, AND
CES LIKE 3 + 4 = X AND 5	- 2 = X.
CAL SENTENCE LIKE 3 + 4 = OF ADDITION.	X FOR A PHYSICAL SITUATION WHERE THE ACTION OF THE
FIT A GIVEN MATHEMATICAL	SENTENCE INVOLVING ADDITION.
CAL SENTENCE FOR A STORY	PROBLEM WHERE ACTION SUGGESTS SUBTRACTION.
GIVEN PICTURED ADDITION	OR SUBTRACTION PROBLEM.
HEMATICAL SENTENCES USING	SUBTRACTION.
K Y = 7 IN WHICH	MANY CORRECT SOLUTIONS ARE POSSIBLE.

0001225011	SELECTS WHICH OF TWO (OR THREE) NUMBERS IS GREATER	(GREATES REF)
0001225012	WRITE NUMBER SENTENCES USING 3 DIGIT NUMERALS AND THE	SYMBOLS 3 D
0001230	NUMBER SYSTEMS (EARLY)	
0001230001	EXPLAIN HOW TO WRITE ROMAN NUMERALS BY COMBINING SEVERAL SYMBOLS.	NUMER
0001255	NUMERALS	
0001255001	COUNTS OBJECTS ORALLY FROM ONE TO TEN BY POINTING TO	OBJECT A ONE T
0001255002	COUNTS ORALLY FROM ONE TO TEN.	EN.
0001255003	PLACES AN X ON THE OBJECT WITH THE SPECIFIED ORDINAL	POSITION ITH T
0001255004	IDENTIFIES THE CARDINAL NUMBER AND NUMERAL OF STRUCTURED GROUPS TO	BER A
0001255005	IDENTIFIES THE CARDINAL NUMBER AND NUMERAL OF STRUCTURED GROUPS 5-	BER A
0001255006	PRESENTED WITH NUMBERS 1-9 IN ORDER, READS THEM FROM	LEFT TO R EN OF
0001255007	WRITES NUMERALS 1 TO 9 FROM LEFT TO RIGHT ON AN ORDERED	SET OF P LEFT
0001255008	TELLS WHAT NUMBER COMES BEFORE OR AFTER A GIVEN NUMBER,	OR IN-BE ORE O
0001255009	SELECTS WHICH OF TWO (OR THREE) NUMERALS IS GREATER OR	LESS THAN EF)

REF) NUMBERS TS GREATER (GREATEST) SMALLER (SMALLEST) FOR NUMBERS TO 100.

G 3 DIGIT NUMERALS AND THE SYMBOLS LESS THAN, =, AND GREATER THAN.

NUMERALS BY COMBINING SEVERAL SYMBOLS.

ONE TO TEN BY POINTING TO OBJECT AND SAYING NUMBER.

EN.

ITH THE SPECIFIED ORDINAL POSITION TO TENTH.

BER AND NUMERAL OF STRUCTURED GROUPS TO 4.

BER AND NUMERAL OF STRUCTURED GROUPS 5-9.

IN ORDER, READS THEM FROM LEFT TO RIGHT.

LEFT TO RIGHT ON AN ORDERED SET OF PICTURES.

ORE OR AFTER A GIVEN NUMBER, OR IN-BETWEEN TWO NUMBERS. (1-9)

E NUMERALS IS GREATER OR LESS THAN ANOTHER. (1-9)

0001255010	IDENTIFIES THE ORDER OF SETS OF NUMBERS THROUGH 9	RELATING TO CO
0001255011	STUDENT WILL NAME THE CARDINAL NUMBER OF ANY GIVEN SET	THROUGH 12.
0001255012	READ NUMBER WORDS THROUGH TEN.	
0001255013	GIVEN NUMBER WORDS FOR 0-10, MATCHES WORDS WITH NUMBERS.	
0001255014	GIVEN NUMBER WORDS FROM 0-10, MATCHES WORDS WITH	STRUCTURED GRO
0001255015	IDENTIFIES EVEN NUMBERS TO 50. (COUNTING 2,4,6,8,10,	..., 50).
0001255016	WRITES EVEN NUMBERS TO 50. (COUNTING 2,4,6,8,10,...,	50).
0001255017	IDENTIFIES NUMBERS TO 50 BY SKIP-COUNTING (2'S, 3'S,	4'S, 5'S).
0001255018	WRITES ODD NUMBERS TO 50. (COUNTING 1,3,5,7,..., 49).	
0001255019	STUDENT COUNTS BY TWO'S THROUGH 20, BY 5'S TO 50, BY	10'S TO 100.
0001255020	COUNTS ORALLY BY ONES TO 100 IN SHORT SEQUENCES.	
0001255021	WRITES NUMERAL FROM 1-100 IN SEQUENTIAL ORDER TO TOTAL	FOR SMALL BLOC
0001255022	WRITES NUMERAL 1-100 TO REPRESENT TOTAL OF AN ORDERED	SET OF PICTURE
0001255023	IDENTIFIES WHAT NUMBER COMES AFTER A GIVEN NUMBER, OR STRUCTURED GROUPS.	BEFORE ANY GIV

NUMBERS THROUGH 9 RELATING TO CONCEPT OF ONE MORE.

UMBER OF ANY GIVEN SET THROUGH 12.

CHES WORDS WITH NUMBERS.

TCHES WORDS WITH STRUCTURED GROUPS.

(COUNTING 2,4,6,8,10, ..., 50).

NTING 2,4,6,8,10,..., 50).

-COUNTING (2'S, 3'S, 4'S, 5'S).

TING 1,3,5,7,..., 49).

20, BY 5'S TO 50, BY 10'S TO 100.

SHORT SEQUENCES.

UENTIAL ORDER TO TOTAL FOR SMALL BLOCKS OF (NUMBERED) OBJECTS.

T TOTAL OF AN ORDERED SET OF PICTURES FOR SMALL BLOCKS OF (NUMBERED) OBJECTS.

ER A GIVEN NUMBER, OR BEFORE ANY GIVEN NUMBER FOR NUMBERS TO 100, WITHIN

0001255024	PRESENTED WITH AN ORDERED ARRANGEMENT OF NUMERALS,	0-100, ARRA
0001255025	IDENTIFIES NUMBER AFTER GIVEN NUMBER OR BEFORE GIVEN	NUMBER VEN
0001255026	SELECTS A STRUCTURED GROUP TO MATCH A GIVEN NUMBER OR	NUMBERS TO
0001255027	STUDENT WRITES NUMBERS TO 150.	150.
0001255028	STUDENT WILL READ NUMERALS TO 150.	TO
0001255029	COUNTS ORALLY TO ONE THOUSAND BY 100'S, BY 10'S, 5'S,	AND 2'S. AND
0001260	PATTERNS	
0001260001	COPY A GIVEN PATTERN OF OBJECTS OR SHAPES.	JECT
0001260002	GIVEN A SERIES OF OBJECTS OR SHAPES IN A PATTERN,	DESCRIBE OR S
0001260003	AFTER SEEING A GIVEN PATTERN OF OBJECTS THAT HAS NO PATTERN OF OBJECTS.	MORE THA RN O
0001270	PLACE VALUE	
0001270001	CONSTRUCTS SET THAT CONTAINS AS MANY OBJECTS AS A GIVEN	NUMBER. NS A
0001270002	MATCHES TWO EQUIVALENT SETS OF OBJECTS IN A ONE-TO-ONE	RELATION S OF
0001270003	IDENTIFIES TEN AS BEING ONE MORE THAN NINE.	MO

ARRANGEMENT OF NUMERALS, 0-100, READS THEM ON REQUEST FROM ANY STARTING POINT.

VEN NUMBER OR BEFORE GIVEN NUMBER WITHOUT STRUCTURED GROUPS: TO 100.

TO MATCH A GIVEN NUMBER OR NUMBERS TO 99.

150.

TO 150.

AND BY 100'S, BY 10'S, 5'S, AND 2'S. STARTING WITH 100, 10, 5, AND 2 RESPECTIVELY.

JECTS OR SHAPES.

OR SHAPES IN A PATTERN, DESCRIBE THE NEXT STEP OF THE PATTERN.

RN OF OBJECTS THAT HAS NO MORE THAN FOUR PARTS, REPRODUCE FROM MEMORY THE SAME

NS AS MANY OBJECTS AS A GIVEN NUMBER.

S OF OBJECTS IN A ONE-TO-ONE RELATIONSHIP. MATCHES SETS TO TEN.

THAN NINE.

0001270004	IDENTIFIES THE IDEA OF GROUPING BY TENS.	G BY
0001270005	STATES PLACE VALUE OF A PARTICULAR DIGIT.	ULAR
0001270006	WRITES THE DIGIT WHICH IS IN THE TENS OR ONES PLACE AS REQUESTED FOR	HE TI
0001270007	WRITES THE NUMERAL WHICH NAMES A STRUCTURED GROUP OF UP TO 100 OBJECTS	A S
0001270008	PLACES LESS THAN SYMBOL OR GREATER THAN SYMBOL TO 100.	INDICATE GREAT ATER
0001270009	GIVEN ANY NUMBER TO 150, THE STUDENT WILL IDENTIFY THE PLACE VALUE OF	TUDE
0001270010	GIVEN THE PLACE VALUE OF THE DIGITS IN ANY NUMBER TO 150, THE STUDE	IGIT

0001295	SETS	
0001295001	RECOGNIZE A GROUP OF OBJECTS THAT HAVE SOMETHING IN COMMON.	HAT
0001295002	DISCRIMINATES SIMILARITIES AMONG OBJECTS.	NG O
0001295003	DISCRIMINATES DIFFERENCES AMONG OBJECTS.	G OB
0001295004	GIVEN A GROUP OF OBJECTS, RECOGNIZE THOSE THAT ARE THE SAME SIZE, THO ARE THE SAME COLOR.	GNIZ
0001295005	GIVEN A GROUP OF OBJECTS WITH TWO OBJECTS DIFFERENT FROM THE REST, REC	TWO
1295006	SELECTS NON-EQUIVALENT SETS AND INDICATES WHICH HAS MORE OR LESS.	D IN

G BY TENS.

JLAR OIGIT.

HE TENS OR ONES PLACE AS REQUESTEO FOR A GIVEN NUMBER.

A STRUCTURED GROUP OF UP TO 100 OBJECTS AS - TENS AND - ONES.

ATER THAN SYMBOL TO INOICATE GREATER OR LESSER WITHOUT STRUCTURED GROUPS: T

TUOENT WILL IDENTIFY THE PLACE VALUE OF EACH DIGIT.

IGITS IN ANY NUMBER TO 150, THE STUDENT WILL NAME THE NUMBER.

HAT HAVE SOMETHING IN COMMON.

NG OBJECTS.

G OBJECTS.

GNIZE THOSE THAT ARE THE SAME SIZE, THOSE THAT ARE THE SAME SHAPE, OR THOSE THAT

TWO OBJECTS DIFFERENT FROM THE REST, RECOGNIZE THE OBJECTS THAT ARE OIFFERENT.

D CATES WHICH HAS MORE OR LESS.

0001295007 CONSTRUCTS NON-EQUIVALENT SETS AND INDICATES WHICH HAS MORE AND TS A

0001295008 PLACES LESS THAN SYMBOL OR GREATER THAN SYMBOL BETWEEN 2 NUMBERS GREAT
GROUPS: TO 9.

0001295009 PLACES GREATER THAN SYMBOL OR LESS THAN SYMBOL BETWEEN 2 NUMBERS OR LE
STRUCTURED GROUPS: TO 100.

0001295010 SELECTS A SET THAT CONTAINS AS MANY OBJECTS AS A GIVEN NUMBER. AS N

0001295011 COMPARES TWO NON-EQUIVALENT SETS AND INDICATES WHICH HAS MORE OR SETS

0001295012 MATCHES TWO NONEQUIVALENT SETS AND INDICATES WHICH HAS MORE OR TS A

0001295013 DETERMINE THAT 8 IS GREATER THAN 5 AND THAT 5 IS LESS THAN 8 BY THAN
THIS FOR ANY TWO NUMBERS LESS THAN 10. S TH

0001295014 COUNT THE MEMBERS OF A SET CONTAINING ONE HUNDRED OR FEWER MEM ONTA

0001295015 COMPARE TWO NON-MATCHING SETS OF LESS THAN 100 OBJECTS TO DECIDE S OF

0001295016 GIVEN EXAMPLES OF SETS, THE STUDENT IDENTIFIES EMPTY SET. STUD

0001295017 USE 0 AS THE SYMBOL FOR THE NUMBER OF ELEMENTS IN THE EMPTY SET E NU

0001295018 EXPRESS THE EMPTY SET.

0001295019 EXPRESS SUBSETS.

0001295020 IDENTIFY THE PROCESS OF ADDITION THROUGH EXPERIENCE WITH JOINING T TION

TS AND INDICATES WHICH HAS MORE AND LESS.

REATER THAN SYMBOL BETWEEN 2 NUMBERS TO INDICATE GREATER OR LESSER WITH STRUCTURED

R LESS THAN SYMBOL BETWEEN 2 NUMBERS TO INDICATE THE GREATER OR LESSER WITH

AS MANY OBJECTS AS A GIVEN NUMBER.

SETS AND INDICATES WHICH HAS MORE OR LESS THROUGH VISUAL INSPECTION.

TS AND INDICATES WHICH HAS MORE OR LESS.

THAN 5 AND THAT 5 IS LESS THAN 8 BY COMPARING APPROPRIATE SETS OF OBJECTS AND DO
S THAN 10.

ONTAINING ONE HUNDRED OR FEWER MEMBERS.

S OF LESS THAN 100 OBJECTS TO DECIDE WHICH SET HAS FEWER (MORE) MEMBERS.

STUDENT IDENTIFIES EMPTY SET.

E NUMBER OF ELEMENTS IN THE EMPTY SET.

TION THROUGH EXPERIENCE WITH JOINING TWO SETS OF OBJECTS.

0001295021 IDENTIFIES THE PLUS SIGN (+) AS IT IS RELATED TO JOINING OF TWO DISJOI IT I

0001295022 EXPRESS THE UNION OF SETS.

0001295023 ADD DISJOINT SETS.

0001295024 USING SETS, THE STUDENT WILL ILLUSTRATE THE COMMUTATIVE PROPERTY OF A LUSTR

0001295025 IDENTIFY THE PROCESS OF SUBTRACTION THROUGH EXPERIENCE WITH SEPARATI TION

0001315 SUBTRACTION

0001315001 FILLS IN MISSING ADDENDS TO MAKE TRUE NUMBER SENTENCES FOR PICTURED TRU

0001315002 FILLS IN NUMBERS (MISSING ADDENDS) TO MAKE TRUE NUMBER SENTENCES FOR OS) T

0001315003 IDENTIFIES THE INVERSE RELATION BETWEEN SUBTRACTION AND ADDITION (USI BETW

0001315004 IDENTIFIES THE INVERSE RELATION BETWEEN SUBTRACTION AND ADDITION (USI BETW

0001315005 IDENTIFIES THE ROLE OF ZERO IN SUBTRACTION PROBLEMS. SUBTR

0001315006 IDENTIFIES THE MINUS SIGN (-) AS A SYMBOL MEANING TAKE AWAY. S A S

0001315007 IDENTIFIES THE SOLUTION TO SUBTRACTION PROBLEMS AS BEING CALLED THE DI ACTI

0001315008 FILLS IN MISSING SUMS TO MAKE TRUE NUMBER SENTENCES FOR PICTURED SUBT UE N

IT IS RELATED TO JOINING OF TWO DISJOINT SETS.

LUSTRATE THE COMMUTATIVE PROPERTY OF ADDITION.

TION THROUGH EXPERIENCE WITH SEPARATING A SUBSET FROM A SET OF OBJECTS.

E TRUE NUMBER SENTENCES FOR PICTURED ADDITION SITUATIONS.

DS) TO MAKE TRUE NUMBER SENTENCES FOR PICTURED SUBTRACTION SITUATIONS.

BETWEEN SUBTRACTION AND ADDITION (USING NUMERALS THROUGH 5).

BETWEEN SUBTRACTION AND ADDITION (USING NUMERALS 6-9).

SUBTRACTION PROBLEMS.

S A SYMBOL MEANING TAKE AWAY.

RACTION PROBLEMS AS BEING CALLED THE DIFFERENCE.

UI BER SENTENCES FOR PICTURED SUBTRACTION SITUATIONS.

0001315009	SOLVES SUBTRACTION EQUATIONS OF SETS NOT LARGER THAN 5, (FIRST H
0001315010	SOLVES SUBTRACTION EQUATIONS OF SETS 6-9.
0001315011	IDENTIFIES THE RELATIONSHIP IN FINDING A MISSING ADDEND AND FIND
0001315012	SOLVES SUBTRACTION EQUATION RELATED TO A SET OF 10. FIRST HO
0001315013	SOLVES SUBTRACTION EQUATIONS WITH DIFFERENCES TO 10, (FIRST H
0001315014	IDENTIFIES THE IDEA OF SUBTRACTING IN PARTS USING MORE THAN ONE
0001315015	SOLVES SUBTRACTION EQUATION OF SETS TO 19.

0001320	SUBTRACTION (WORD PROBLEMS)
0001320001	SOLVE WORD PROBLEMS INVOLVING SUBTRACTION OF TWO 2 DIGIT NUMERALS

0001325	VALUE OF COINS
0001325001	RECOGNIZES PENNY, ITS VALUE AND SYMBOL.
0001325002	USES CENTS SIGN.
0001325003	USES TERM CENT.
0001325004	RECOGNIZES NICKEL, DIME.

NS OF SETS NOT LARGER THAN 5, (FIRST HORIZONTAL, THEN VERTICAL). 000

NS OF SETS 6-9. 000

P IN FINDING A MISSING ADDEND AND FINDING A DIFFERENCE. 000

N RELATED TO A SET OF 10. FIRST HORIZONTAL; THEN VERTICAL. 000

NS WITH DIFFERENCES TO 10. (FIRST HORIZONTAL; THEN VERTICAL). 000

TRACTING IN PARTS USING MORE THAN ONE STEP. 000

N OF SETS TO 19. 000

000

000

)

ING SUBTRACTION OF TWO 2 DIGIT NUMERALS.

E AND SYMBOL.

0001325005 FINDS VALUE OF PENNIES AND NICKELS.

0001325006 RECOGNIZE THE COMPARATIVE VALUE OF COINS (PENNIES, NICKELS, DIMES).

0001325007 RECOGNIZES QUARTER.

0001325008 IDENTIFIES HALF DOLLAR AND DOLLAR.

0001325009 MATCHES COINS WITH NUMERICAL VALUES.

0001325010 ADD TO 50 CENTS.

0001325011 SELECT FROM A GROUP OF COINS A COMBINATION OF COINS THAT TOTALS 75 CENTS.

0001325012 USE COINS IN MAKING CHANGE (PENNIES, NICKELS, DIMES).

0001325013 UNDERSTAND THAT PRICE TAGS ARE RECORDED MEASUREMENTS OF MONEY.

0002005	ADDITION	
0002005001	USES THE NUMBER LINE IN WORKING WITH ADDITION CONCEPT.	KING
0002005002	RECOGNIZES AND USES THE SYMBOLS + AND =.	BOLS
0002005003	FILLS IN NUMBERS (MISSING SUMS TO MAKE TRUE NUMBER SENTENCES	UMS
0002005004	RECOGNIZE ZERO AS THE IDENTITY ELEMENT FOR ADDITION IN THE SET OF	ITY
0002005005	WRITES THE NUMBER OF OBJECTS IN EACH OF TWO SETS AND THE NUMBER OF	S IN
0002005006	WRITES EQUATIONS RELATED TO A PARTICULAR SET (OR FAMILY) TO 10.	A P
0002005007	RECOGNIZES THE COMMUTATIVE (ORDER) PRINCIPLE IN ADDITION.	(ORD
0002005008	DISCOVER FROM THE ADDITION TABLE, NUMBER PATTERNS THRDUGH TH	TABL
0002005009	CAN DEMONSTRATE THAT THE MATHEMATICAL OPERATION OF INTERSECTI	THEM
0002005010	BEGIN TO APPRECIATE USE OF TEN TO MAKE ADDITION EASY.	TEN
0002005011	USES PARENTHESES AND ASSOCIATIVE PRINCIPLE TO SHOW WHICH NUMBERS AR	ATIV
0002005012	RECALL THE ADDITION FACTS THROUGH THE SUM OF 18.	HROU
0002005013	GIVEN ANY NUMBER TO 18, STUDENT WILL RE-NAME NUMBER IN ALL POSSIB	DENT
0002005014	ADD TWO 1 DIGIT NUMBERS VERTICALLY AND/OR HORIZONTALLY WHERE THE	TICA

KING WITH ADDITION CONCEPT.

BOLS + AND =.

UMS TO MAKE TRUE NUMBER SENTENCES.

ITY ELEMENT FOR ADDITION IN THE SET OF WHOLE NUMBERS.

S IN EACH OF TWO SETS AND THE NUMBER OF OBJECTS WHEN PUT TOGETHER. SUMS TO 10.

A PARTICULAR SET (OR FAMILY) TO 10.

(ORDER) PRINCIPLE IN ADDITION.

TABLE, NUMBER PATTERNS THROUGH THE SUM 18.

THEMATICAL OPERATION OF INTERSECTION IS RELATED TO ADDITION.

TEN TO MAKE ADDITION EASY.

ATIVE PRINCIPLE TO SHOW WHICH NUMBERS ARE ADDED FIRST.

HROUGH THE SUM OF 18.

DENT WILL RE-NAME NUMBER IN ALL POSSIBLE ADDITION COMBINATIONS.

TICALLY AND/OR HORIZONTALLY WHERE THE SUM IS NOT GREATER THAN 18.

0002005015 RECOGNIZES THAT TWO EVEN AODENOS PROOUCE AN EVEN SUM. PROD

0002005016 RECOGNIZES THAT TWO ODO ADDENDS PRO.UCE AN EVEN SUM. PRODU

0002005017 FIND THE MISSING NUMBER IN AN ADDITION PROBLEM WHERE THE NUMERALS ARE L DITIO

0002005018 STUDENT USES THE HORIZONTAL AND VERTICAL ALGORISMS TO SOLVE PROBLEMS VERTI

0002005019 GIVEN ONE MEMBER OF A RELATED NUMBER FACT WITH SUMS TO 18, THE STUDEN MBER

0002005020 USING SETS, STUDENT WILL ILLJSTRATE THE ASSOCIATIVE PROPERTY OF AO ATE

0002005021 USES ASSOCIATIVE (GROUPING) PRINCIPLE FOR FINDING SUMS GREATER THAN 1 CIPLE

0002005022 THE STUOENT USES EXPANDEO NOTATION TO AOD PAIRS OF TWO- DIGIT NUMERALS ON TO

0002005023 ADD THREE 2 DIGIT NUMERALS WITHOUT REGROUPING. UT RE

0002005024 FINDS SUMS OF THREE AND FOUR DIGIT NUMBERS WITHOUT REGROUPING. I NU

0002005025 SOLVES COLUMN ADDITION PROBLEMS WITH THREE OR MORE ADDENOS WITH S WITH

0002010 ADDITION (WORD PROBLEMS)

0002010001 READS AND TRANSFERS INFORMATION FROM A WORD PROBLEM TO THE SYMBOLS OF FROM

0002010002 SOLVE WORO PROBLEMS FOR ADDITION PROBLEMS WHERE THE SUM IS NOT GREATER PRO

PRODUCE AN EVEN SUM.

PRODUCE AN EVEN SUM.

DITION PROBLEM WHERE THE NUMERALS ARE LESS THAN 18.

VERTICAL ALGORISMS TO SOLVE PROBLEMS OF ADDITION WITH SUMS TO 18.

MBER FACT WITH SUMS TO 18, THE STUDENT NAMES THE OTHER THREE MEMBERS.

ATE THE ASSOCIATIVE PROPERTY OF ADDITION.

CIPLE FOR FINDING SUMS GREATER THAN 10.

ON TO ADD PAIRS OF TWO- DIGIT NUMERALS.

UT REGROUPING.

I NUMBERS WITHOUT REGROUPING.

WITH THREE OR MORE ADDENDS WITH SUMS TO 18.

FROM A WORD PROBLEM TO THE SYMBOLS OF ARITHMETIC TO SOLVE THE PROBLEM.

MS WHERE THE SUM IS NOT GREATER THAN 18.

0002030	DIVISION	
0002030001	IDENTIFIES THE SYMBOL OF DIVISION.	VISI
0002030002	RECOGNIZES THAT DIVISION IS THE INVERSE OF	MULTIPLIC S THE
0002045	FRACTIONS	
0002045001	USES CONCRETE AND SEMI-CONCRETE DEVICES TO DIVIDE AN	OBJECT OR CRETE
0002045002	IDENTIFIES ONE HALF, ONE THIRD, ONE FOURTH, ONE FIFTH	OF AN OBJ HIRD,
0002045003	IDENTIFIES TWO THIRDS AND THREE FOURTHS OF A WHOLE	OBJECT. THREE
0002045004	USES CONCRETE AND SEMI-CONCRETE DEVICES TO DIVIDE A SET	OF OBJECT CRETE
0002045005	IDENTIFIES ONE HALF, ONE THIRD, ONE FOURTH, ONE FIFTH	SET OF OB IRD,
0002045006	IDENTIFIES TWO-THIRDS AND THREE-FOURTHS OF A WHOLE SET	OF OBJECT THREE
0002045007	RECOGNIZES THE NUMERALS OF ONE-HALF, ONE-THIRD, ONE-	FOURTH, O ONE-
0002060	GEOMETRY (PLANE FIGURES) - CIRCLE -	CIRC
0002060001	RECOGNIZES AND NAMES CIRCLE.	E.
0002065	GEOMETRY (PLANE FIGURES) - CONGRUENCE -	CONG

VISION.

S THE INVERSE OF MULTIPLICATION.

CRETE DEVICES TO DIVIDE AN OBJECT OR INTO HALVES, THIRDS, FOURTHS, FIFTHS.

HIRD, ONE FOURTH, ONE FIFTH OF AN OBJECT, IN VARIOUS WAYS.

THREE FOURTHS OF A WHOLE OBJECT.

CRETE DEVICES TO DIVIDE A SET OF OBJECTS INTO HALVES, THIRDS, FOURTHS, FIFTHS.

HIRD, ONE FOURTH, ONE FIFTH SET OF OBJECTS IN VARIOUS WAYS.

THREE-FOURTHS OF A WHOLE SET OF OBJECTS.

ONE-HALF, ONE-THIRD, ONE- FOURTH, ONE-FIFTH, TWO-THIRDS, THREE-FOURTHS.

CIRCLE -

.

CONGRUENCE -

ERIC

0002065001 RECOGNIZE CONGRUENT SEGMENTS AS SEGMENTS HAVING THE SAME LENGTH. SEGM

0002065002 RECOGNIZE CONGRUENT, PLANE FIGURES AS FIGURES WHICH FIT ON ONE ANOTHER ES A

0002070 GEOMETRY (PLANE FIGURES) - CONSTRUCTIONS - RUCT

0002070001 DRAW SIMPLE GEOMETRIC FIGURES.

0002080 GEOMETRY (PLANE FIGURES) - LINES - -

0002080001 NAMES LINE SEGMENTS BY ENDPOINTS. .

0002085 GEOMETRY (PLANE FIGURES) - OPEN/CLOSED FIGURES - CLOS

0002085001 READS DIRECTIONS WITH NAMES OF SIMPLE GEOMETRIC FIGURES. IMPL

0002085002 LABEL SIMPLE GEOMETRIC FIGURES.

0002085003 RECOGNIZES OPEN AND CLOSED FIGURES. ES.

0002085004 INDICATES UNDERSTANDING OF TERM REGION BY SHADING REGIONS OF SIM REG

0002095 GEOMETRY (PLANE FIGURES) - QUADRILATERALS - ILAT

0002095001 RECOGNIZES AND NAMES RECTANGLE.

SEGMENTS HAVING THE SAME LENGTH.

ES AS FIGURES WHICH FIT ON ONE ANOTHER.

RUCTIONS -

-

.

CLOSED FIGURES -

IMPLE GEOMETRIC FIGURES.

ES.

REGION BY SHADING REGIONS OF SIMPLE CLOSED CURVES.

ILATERALS -

ERIC

0002095002 RECOGNIZES AND NAMES SQUARE.

0002100 GEOMETRY (PLANE FIGURES) - SETS OF POINTS -

0002100001 LABEL POINTS IN LINE.

0002100002 RECOGNIZE A POINT AS A POSITION.

0002100003 IDENTIFIES CURVES, LINES, LINE SEGMENTS, CORNERS.

0002100004 RECOGNIZE A LINE SEGMENT OR CURVE AS A SET OF POINTS.

0002100005 RECOGNIZE A STRAIGHT LINE AS A SET OF POINTS WITH NO BEGINNING

0002100006 RECOGNIZE A SIMPLE CURVE (IN A PLANE) AS ONE THAT DOES NOT CROSS

0002100007 RECOGNIZE CLOSED SIMPLE CURVES.

0002100008 RECOGNIZE THE INSIDE AND OUTSIDE OF SIMPLE CLOSED CURVES.

0002125 GEOMETRY (PLANE FIGURES) - TRIANGLE -

0002125001 RECOGNIZES AND NAMES TRIANGLE.

0002135 GEOMETRY (SOLIDS)

SETS OF POINTS -

TION.

INE SEGMENTS, CORNERS.

CURVE AS A SET OF POINTS.

S A SET OF POINTS WITH NO BEGINNING AND NO END.

N A PLANE) AS ONE THAT DOES NOT CROSS ITSELF.

VES.

TSIDE OF SIMPLE CLOSED CURVES.

TRIANGLE -

LE.

0002135001	NAMES PICTURED REPRESENTATIONS OF SOLIDS - RECTANGLE,	SQUARE, CIRCLE
0002135002	SELECTS CORRECT PICTURED REPRESENTATION WHEN NAME OF	SOLID IS GIVEN
0002135003	DRAWS PICTURED REPRESENTATIONS OF SOLIDS WHEN NAME OF	SOLID IS GIVEN
0002170	MEASUREMENT (DRY)	
0002170001	USE STANDARD UNITS TO NEAREST WHOLE UNIT FOR WEIGHT	(POUNDS).
0002175	MEASUREMENT (INSTRUMENTS)	
0002175001	IDENTIFY PROPER INSTRUMENTS FOR MEASURING DIFFERENT	OBJECTS.
0002180	MEASUREMENT (LINEAR)	
0002180001	IDENTIFIES INCH, FOOT, YARD AS STANDARD U.S. MEASURE.	
0002180002	USES STANDARD UNITS TO THE NEAREST WHOLE UNIT FOR	LINEAR MEASURE
0002180003	REPRESENTS LENGTH OF ITEMS TO NEAREST INCH IN LINEAR	MEASURES.
0002180004	MEASURES ITEMS USING THE INCH SCALES.	
0002180005	MAKE A RULER WITH DIVISIONS SHOWING HALF UNITS.	

F SOLIDS - RECTANGLE, SQUARE, CIRCLE, TRIANGLE.

NTATION WHEN NAME OF SOLID IS GIVEN.

F SOLIDS WHEN NAME OF SOLID IS GIVEN.

OLE UNIT FOR WEIGHT (POUNDS).

MEASURING DIFFERENT OBJECTS.

TANDARD U.S. MEASURE.

ST WHOLE UNIT FOR LINEAR MEASURE (INCHES AND FEET).

AREST INCH IN LINEAR MEASURES.

ALES.

ING HALF UNITS.

ERIC

0002180006	MEASURES ITEMS USING THE CENTIMETER SCALES.	NTIME
0002185	MEASUREMENT (LIQUID)	
0002185001	IDENTIFIES CONTAINERS AS CUPS, PINTS, QUARTS, GALLONS.	PS, P
0002185002	IDENTIFIES CONTAINERS' RELATION TO EACH OTHER.	TION
0002185003	USE STANDARD UNITS TO NEAREST WHOLE UNIT FOR LIQUID	MEASURE (ST WH
0002185004	SOLVES SIMPLE WRITTEN PROBLEMS USING CUPS, PINTS,	QUARTS, G EMS L
0002210	MEASUREMENT (TIME)	
0002210001	RELATE CONCEPT OF TIME MEASUREMENT WITH SUCH UNITS AS	YEAR, MON UREME
0002210002	TELLS TIME TO THE HOUR AND HALF HOUR.	HALF
0002210003	TELL TIME TO THE NEAREST QUARTER HOUR.	ARTER
0002220	MULTIPLICATION	
0002220001	ADD EQUIVALENT SETS.	
0002220002	FINDS PRODUCTS USING PRODUCT SETS (MANY TO MANY	MATCHING) T SE

NTIMETER SCALES.

PS, PINTS, QUARTS, GALLONS.

TION TO EACH OTHER.

ST WHOLE UNIT FOR LIQUID MEASURE (PINTS AND QUARTS).

EMS USING CUPS, PINTS, QUARTS, GALLONS.

UREMENT WITH SUCH UNITS AS YEAR, MONTH, WEEK, DAY, HOUR, MINUTE AND SECOND.

HALF HOUR.

ARTER HOUR.

T SETS (MANY TO MANY MATCHING).

ERIC

0002220003	FINDS PRODUCTS USING REPEATED ADDITION.		DITIO
0002220004	FINDS PRODUCTS USING NUMBER LINES.		S.
0002220005	FINDS PRODUCTS USING EQUIVALENT SETS.		SETS.
0002220006	FINDS PRODUCTS USING ARRAYS.		
0002220007	IDENTIFIES THE SYMBOL X (TIMES).		
0002220008	RECOGNIZES THE MULTIPLICATIVE PROPERTIES OF ZERO AND	ONE.	OPER
0002220009	RECOGNIZE A MULTIPLICATION FACT THAT REPRESENTS A GIVEN	REPEATED ADDIT	THAT
0002220010	USE THE MULTIPLICATION FACTS THROUGH THE PRODUCT 18.		OUGH
0002220011	ONE FACTOR = 2, SECOND FACTOR NO GREATER THAN 14, VERTICAL FORM.	STUDENT SOLVES	GREA
0002220012	MULTIPLY 2 NUMERALS WHERE THE PRODUCT IS NOT GREATER	THAN 25.	ODUC
0002220013	USE ASSOCIATIVE PROPERTY OF MULTIPLICATION IN SET OF	WHOLE NUMBERS.	IPLI
0002220014	USES SET INTERPRETATION OF MULTIPLICATION FOR SOLVING	WRITTEN PROBLE	PLIC

0002225 NUMBER SENTENCES

0002225001	WRITE AN EQUATION FOR A PICTURED ADDITION PROBLEM WHERE	THE SUM OF THE	ADD

DITION.	
S.	
SETS.	
OPERTIES OF ZERO AND	ONE.
THAT REPRESENTS A GIVEN	REPEATED ADDITION FACT.
OUGH THE PRODUCT 18.	
GREATER THAN 14,	STUDENT SOLVES MULTIPLICATION PROBLEM, HORIZONTAL AND
ODUCT IS NOT GREATER	THAN 25.
IPLICATION IN SET OF	WHOLE NUMBERS. (4 X 3) X 2 = 4 X (3 X 2).
PLICATION FOR SOLVING	WRITTEN PROBLEMS.
A ON PROBLEM WHERE	THE SUM OF THE NUMERALS IS NOT GREATER THAN 18.

0002225002 WRITE AN EQUATION FOR A PICTURED SUBTRACTION PROBLEM WHERE THE TURED

0002225003 GIVEN ADDITION PROBLEM WITH TWO ADDENDS AND THE SUM, WRITE AN TWO
SAME NUMERALS: TO 10.

0002225004 FIND SOLUTIONS FOR SENTENCES LIKE 3 + 2 = 8 - X, USING NUMBER LI S LIK

0002225005 USE THE TERMS GREATER THAN AND LESS THAN, AND EQUALS IN SENTEN AND

0002225006 PLACE THE CORRECT SYMBOL IN THE PLACEHOLDER IN SENTENCES LIKE 13 + THE

0002225007 USE SENTENCES LIKE 5 + X = 12, X + 6 = 8, 12 - X = 8, AND X - 5 12, X
SOLUTIONS FOR THE SENTENCES.

0002225008 FIND SOLUTIONS FOR SENTENCES LIKE 3 + 2 = 8 - X, X + 5 = 8 + 7, 8 S LIK
WITH THE AID OF SETS OF OBJECTS. CTS.

0002225009 PLACES GREATER THAN, LESS THAN BETWEEN TWO NUMBERS TO INDICATE THAN

0002225010 SELECTS WHICH OF TWO (OR THREE) NUMBERS IS GREATER (GREATEST REE)

0002225011 WRITES GREATER THAN, LESS THAN TO SHOW INEQUALITIES OF FOUR-DIGI THAN

0002225012 USE THE CORRECT SYMBOL (LESS THAN, = GREATER THAN), THAT BELONGS B S THA
HAS MORE THAN 3 DIGITS.

0002230 NUMBER SYSTEMS (EARLY)

0002230001 RECOGNIZES ROMAN NUMERALS AS ANOTHER SYSTEM OF NUMERATIO ANO

0002230002 RELATES TO THE ROMAN CONCEPT OF NUMERATION. EX: VI MEANS 5 + OF

TURED SUBTRACTION PROBLEM WHERE THE MINUEND IS NOT GREATER THAN 18.

TWO ADDENDS AND THE SUM. WRITE AN EQUATION FOR A SUBTRACTION PROBLEM USING THE

S LIKE 3 + 2 = 8 = X, USING NUMBER LINE.

AND LESS THAN, AND EQUALS IN SENTENCES.

THE PLACEHOLDER IN SENTENCES LIKE 13 * 5 = 8 AND 15 * 3 = 5.

12, X + 6 = 8, 12 = X = 8, AND X = 5 = 6 TO REPRESENT PHYSICAL SITUATIONS AND FIND

S LIKE 3 + 2 = 8 = X, X + 5 = 8 + 7, 8 + X LESS THAN 12, AND 4 + 9 GREATER THAN X + 5,
ECTS.

HAN BETWEEN TWO NUMBERS TO INDICATE THE GREATER OR LESSER NUMBER: TO 100.

REE) NUMBERS IS GREATER (GREATEST), SMALLER, (SMALLEST), FOR NUMBERS TO 100.

HAN TO SHOW INEQUALITIES OF FOUR-DIGIT NUMERALS.

S THAN, = GREATER THAN), THAT BELONGS BETWEEN TWO GIVEN NUMERALS, WHEN NEITHER NUMERAL

S ANOTHER SYSTEM OF NUMERATION.

MERATION. EX: VI MEANS 5 + 1, IV MEANS 5 = 1.

0002230003 USES ROMAN NUMERALS TO XXXIX.

0002250 NUMBERS (WHOLE)

0002250001 RECOGNIZES THE SET OF WHOLE NUMBERS.

0002250002 IDENTIFIES THE SET OF EVEN NUMBERS.

0002250003 IDENTIFIES THE SET OF ODD NUMBERS.

0002250004 RECOGNIZE THAT THERE IS NO LARGEST WHOLE NUMBER.

0002255 NUMERALS

0002255001 READS NUMBER WORDS 0-10.

0002255002 SPELLS NUMBER WORDS 0-10.

0002255003 STUDENT READS THE NUMBER WORDS TO TWENTY.

0002255004 WRITE NUMBER WORDS TO TWENTY.

0002255005 STUDENT WILL NAME CARDINAL NUMBER OF ANY GIVEN SET TO 20.

0002255006 USE ORDINAL NUMBERS THROUGH TENTH.

0002255007 WRITE MANY SYMBOLS FOR THE SAME NUMBER; FOR EXAMPLE, 6 + 3, 5 + 5, 1

ERS.

RS.

S.

ST WHOLE NUMBER.

TWENTY.

R OF ANY GIVEN SET TO 20.

U FOR EXAMPLE, 6 + 3, 5 + 5, 17 - 8, AND 9 FOR NINE.

0002255008 COUNTS BY MULTIPLES OF 3, 4, 5, AND 10.

0002255009 READS SHORT SEQUENCES OF NUMBERS FROM ANY STARTING POINT TO 100.

0002255010 WRITES SHORT SEQUENCES OF NUMBERS FROM ANY STARTING POINT TO

0002255011 READS NUMERALS 0-100.

0002255012 WRITES NUMBERS 0-100.

0002255013 COMPLETE EXERCISES FOR COUNTING BY TENS AND FIVE FROM ANY START

0002255014 SUPPLIES THE NUMBER THAT COMES BEFORE, AFTER, OR BETWEEN ANY GIVEN

0002255015 ARRANGE GIVEN NUMBERS IN ORDER FROM THE LEAST TO THE GREATEST

0002255016 COUNT BY 5'S, 10'S, AND 100'S.

0002255017 LIST THE ODD NUMBERS FROM 1-99.

0002255018 LIST THE EVEN NUMBERS FROM 2-100.

0002255019 STUDENT WILL COUNT BY 2'S, 5'S, AND 10'S TO 200.

0002255020 COUNTS AND WRITES ORDERED SEQUENTIAL NUMERALS LESS THAN 1000.

0002255021 SKIP-COUNTS BY TENS, HUNDREDS, THOUSANDS FROM ANY GIVEN NUMERAL U

4, 5, AND 10.

UMBERS FROM ANY STARTING POINT TO 100.

NUMBERS FROM ANY STARTING POINT TO 100.

NTING BY TENS AND FIVE FROM ANY STARTING POINT: TO 100.

OMES BEFORE, AFTER, OR BETWEEN ANY GIVEN NUMBERS TO 100.

RDER FROM THE LEAST TO THE GREATEST TO 100.

O'S.

1-99.

2-100.

5'S, AND 10'S TO 200.

SEQUENTIAL NUMERALS LESS THAN 1000.

EDS, THOUSANDS FROM ANY GIVEN NUMERAL UP TO 9,999.

0002255022 READ ANY NUMERAL THROUGH 999.

0002255023 STUDENT WRITES NUMBERS TO 999.

0002260 PATTERNS

0002260001 RECOGNIZE RELATIONSHIP BETWEEN GEOMETRIC AND NUMERICAL PATTERNS.

0002270 PLACE VALUE

0002270001 RENAMES TEN ONE AS ONE TEN.

0002270002 RENAMES ONE GREATER THAN TEN AS TENS AND ONES.

0002270003 WRITES TWO-DIGIT NUMERALS IN EXPANDED NOTATION (ONES AND TENS).

0002270004 RENAMES ONE TEN AS TEN ONES, ADDS TEN ONES TO ONES AS GIVEN. EX.

0002270005 RECOGNIZE THE ONES, TENS, AND HUNDREDS PLACE IN A 3 DIGIT NUMERAL

0002270006 GIVEN THE PLACE VALUE OF THE DIGITS IN ANY NUMBER TO 999, STUDENT W

0002270007 GIVEN ANY NUMBER TO 999, THE STUDENT WILL IDENTIFY THE PLACE VALUE OF

0002270008 WRITE THREE-DIGIT NUMERALS IN EXPANDED NOTATION; FOR EXAMPLE, 765 =

0002270009 IDENTIFIES PLACE VALUE OF GIVEN NUMERALS AS ONES, TENS, HUNDREDS, AND OR NUMBERS.

EOMETRIC AND NUMERICAL PATTERNS.

TENS AND ONES.

ANDED NOTATION (ONES AND TENS).

S TEN ONES TO ONES AS GIVEN. EX. 56 = 4 TENS, 16 ONES.

NDREDS PLACE IN A 3 DIGIT NUMERAL.

ITS IN ANY NUMBER TO 999, STUDENT WILL NAME THE NUMBER.

DENT WILL IDENTIFY THE PLACE VALUE OF EACH DIGIT.

PANDED NOTATION; FOR EXAMPLE, 765 = 700 + 60 + 5.

NI S AS ONES, TENS, HUNDREDS, AND THOUSANDS (FOUR DIGIT NUMERALS) IN WORDS

0002270010	PLACES THE NUMBER THAT COMES BEFORE, AFTER, OR BETWEEN	ANY GIVEN
0002270011	WRITES FOUR DIGIT NUMERALS IN EXPANDED NOTATION.	
0002295	SETS	
0002295001	IDENTIFIES EQUIVALENT SETS 0-10.	
0002295002	IDENTIFIES NON-EQUIVALENT SETS 0-10.	
0002295003	ADD EQUIVALENT SETS.	
0002295004	IDENTIFY THE PROCESS OF MULTIPLICATION THROUGH OBJECTS.	EXPERIENC
0002315	SUBTRACTION	
0002315001	FILLS IN ADDENDS TO MAKE TRUE NUMBER SENTENCES.	
0002315002	COMPLETES EXERCISES ON INVERSE RELATION BETWEEN ADDITION AND SUBTR	
0002315003	FINDS DIFFERENCES USING THE NUMBER LINE.	
0002315004	USES NUMBER LINE TO FIND MISSING ADDENDS.	
0002315005	RECOGNIZE THAT SUBTRACTION IS NOT COMMUTATIVE.	
0002315006	SUBTRACT A 1 DIGIT NUMERAL FROM A LARGER 1 DIGIT NUMERAL VERTICALL	

S BEFORE, AFTER, OR BETWEEN ANY GIVEN THREE OR FOUR DIGIT NUMERALS.

N EXPANDED NOTATION.

0-10.

TS 0-10.

IPLICATION THROUGH EXPERIENCE WITH JOINING SEVERAL EQUIVALENT SETS OF

JE NUMBER SENTENCES.

RSE RELATION BETWEEN ADDITION AND SUBTRACTION TO 10.

NUMBER LINE.

SSING ADDENDS.

S NOT COMMUTATIVE.

R LARGER 1 DIGIT NUMERAL VERTICALLY AND/OR HORIZONTALLY.

0002315007	RECOGNIZE ZERO AS THE IDENTITY ELEMENT FOR SUBTRACTION	IN THE SET OF
0002315008	SOLVES TWO DIGIT SUBTRACTION EQUATIONS WITHOUT	REGROUPING.
0002315009	IDENTIFIES THE INVERSE RELATIONSHIP OF SUBTRACTION AND	ADDITION IN US
0002315010	RECOGNIZES AND USES SYMBOLS (=) AND (≠).	
0002315011	SOLVES SUBTRACTION EQUATIONS FROM SETS, 0-9.	
0002315012	RECOGNIZES INVERSE RELATIONSHIP OF ADDITION AND	SUBTRACTION TH
0002315013	USES HORIZONTAL AND VERTICAL PATTERNS FOR SUBTRACTION.	
0002315014	FIND THE MISSING NUMBER IN A SUBTRACTION PROBLEM WHERE	THE NUMERALS A
0002315015	RECALL THE SUBTRACTION FACTS THROUGH SUM OF 18.	
0002315016	SUBTRACT NUMERALS WHERE THE MINUEND IS NOT GREATER THAN	18.
0002315017	RECOGNIZES THE INEQUALITIES IN PREPARATION FOR	SUBTRACTING WI
0002315018	BEGIN TO APPRECIATE USE OF TEN TO MAKE SUBTRACTION EASY.	
0002315019	REGROUPS TENS IN TWO DIGIT NUMBERS FOR SUBTRACTION.	
0002315020	SUBTRACT 2 DIGIT NUMERALS WITHOUT REGROUPING.	

LEMENT FOR SUBTRACTION IN THE SET OF WHOLE NUMBERS.

ATIONS WITHOUT REGROUPING.

HIP OF SUBTRACTION AND ADDITION IN USING 0-9.

AND (=).

M SETS, 0-9.

OF ADDITION AND SUBTRACTION THROUGH 18.

TERNS FOR SUBTRACTION.

TRACTION PROBLEM WHERE THE NUMERALS ARE LESS THAN 18.

OUGH SUM OF 18.

END IS NOT GREATER THAN 18.

REPARATION FOR SUBTRACTING WITH REGROUPING.

O MAKE SUBTRACTION EASY.

RS FOR SUBTRACTION.

REGROUPING.

0002315021 SUBTRACT 2 DIGIT NUMERALS WITH REGROUPING. ITH F

0002315022 SOLVES SUBTRACTION EQUATIONS INVOLVING THREE AND FOUR DIGIT NUME S INV

0002320 SUBTRACTION (WORD PROBLEMS)

0002320001 SOLVE WORD PROBLEMS FOR SUBTRACTION WHERE THE MINUEND IS NOT GRE TRAC

0002325 VALUE OF COINS

0002325001 IDENTIFIES THE COINS, PENNY, NICKEL, DIME, QUARTER, HALF DOLLA NI

0002325002 MAKE CHANGE CORRECTLY FOR QUANTITIES UP TO 25 CENTS. UANT

0002325003 GIVES CHANGE IN SMALLEST NUMBER OF COINS FOR VALUES TO 75 CENTS. MBER

0002325004 SOLVES ADDITION AND SUBTRACTION MONEY PROBLEMS, AMOUNTS LESS THAN TION

0002325005 GIVES VALUE OF COIN COLLECTIONS INVOLVING ALL U.S. COINS BY COUNTIN IONS

0002325006 SELECTS COINS EQUAL IN VALUE TO SUMS TO $1.00 OUT OF A SET OF MIX E TO

ITH REGROUPING.

S INVOLVING THREE AND FOUR DIGIT NUMERALS; NO REGROUPING.

TRACTION WHERE THE MINUEND IS NOT GREATER THAN 18.

, NICKEL, DIME, QUARTER, HALF DOLLAR.

UANTITIES UP TO 25 CENTS.

MBER OF COINS FOR VALUES TO 75 CENTS.

TION MONEY PROBLEMS, AMOUNTS LESS THAN $1.00.

IONS INVOLVING ALL U.S. COINS BY COUNTING TO $1.00.

E TO SUMS TO $1.00 OUT OF A SET OF MIXED COINS.

0003005	ADDITION	
0003005001	DISCOVER NUMBER PATTERNS FROM THE ADDITION TABLES.	
0003005002	GIVEN ANY NUMBER SENTENCE, STUDENT IDENTIFIES THE	REMAINING MEMB
0003005003	USES COMMUTATIVE PRINCIPLE OF ADDITION.	
0003005004	USES ZERO (IDENTITY) AND ONE PRINCIPLE OF ADDITION.	
0003005005	GIVEN THE SUM AND ONE ADDEND IN AN ADDITION PROBLEM,	FIND THE MISSI
0003005006	WRITES ADDITION, EQUATIONS WITH ADDENDS AND USES VARYING	NUMBERS OF DIG
0003005007	WRITES RELATED ADDITION EQUATIONS FOR GIVEN SETS, NUMBER	LINES.
0003005008	FINDS SUMS COLUMN ADDITION, NO REGROUPING ONE OR TWO	DIGIT NUMBERS,
0003005009	STUDENT USES THE VERTICAL ALGORISM TO SOLVE ADDITION	PROBLEMS OF TH
0003005010	ADD TWO 2 DIGIT NUMERALS BY USING EXPANDED NOTATION.	
0003005011	USES ASSOCIATIVE PRINCIPLE OF ADDITION TO ADD TWO OR	MORE DIGIT NUM
0003005012	DEMONSTRATE UNDERSTANDING OF GROUPING AND REGROUPING BY 3 HUNDREDS + X TENS + 4 ONES BY MEANS OF TALLY BOXES OR	COMPLETING SEN OTHER DEVICES.
0003005013	ADD THREE 2 DIGIT NUMERALS WITHOUT REGROUPING.	
0003005014	ADDS, WITH REGROUPING, THREE DIGIT NUMERALS, TWO	ADDENDS,

HE ADDITION TABLES.

ENT IDENTIFIES THE REMAINING MEMBERS OF THE ADDITION FAMILY.

DDITION.

INCIPLE OF ADDITION.

AN ADDITION PROBLEM, FIND THE MISSING ADDEND, USING INVERSE OPERATION.

ADDENDS AND USES VARYING NUMBERS OF DIGITS IN VERTICAL FORM.

NS FOR GIVEN SETS, NUMBER LINES.

REGROUPING ONE OR TWO DIGIT NUMBERS, MULTIPLE ADDENDS.

ISM TO SOLVE ADDITION PROBLEMS OF THREE AND FOUR DIGIT NUMERALS.

NG EXPANDED NOTATION.

DDITION TO ADD TWO OR MORE DIGIT NUMERALS.

OUPING AND REGROUPING BY MEANS OF TALLY BOXES OR COMPLETING SENTENCES SUCH AS 458 = X + 50 + 8 AND 394 = OTHER DEVICES.

OUT REGROUPING.

GIT NUMERALS, TWO ADDENDS.

0003010	ADDITION (WORD PROBLEMS)	
0003010001	SOLVE TO THE NEAREST MINUTE, 1 STEP ADDITION STORY	PROBLEMS
0003010002	WRITE AND SOLVE EQUATIONS FOR STORY PROBLEMS REQUIRING	ADDITION
0003010003	SOLVE WORD PROBLEMS FOR ADDITION OF 2 NUMERALS WITH NO	MORE THAN
0003030	DIVISION	
0003030001	FINDS MISSING FACTORS FOR BASIC FACTS.	
0003030002	DIVIDE GIVEN SET OF NO MORE THAN 20 ELEMENTS INTO	GROUPS OF
0003030003	WRITES DIVISION EQUATIONS FOR GIVEN NUMBER LINES.	
0003030004	WRITE DIVISION EQUATIONS FOR GIVEN SETS.	
0003030005	USES REPEATED SUBTRACTION TO SOLVE BASIC DIVISION	EQUATIONS
0003030006	FIND THE QUOTIENT OF A DIVISION PROBLEM WITH A 2 DIGIT SUBTRACTION.	DIVIDEND
0003030007	RECOGNIZES DIVISION AS THE INVERSE OF MULTIPLICATION.	
0003030008	USES THE ONE PRINCIPLE FOR DIVISION.	
0003030009	RECOGNIZES 0 IS NEVER A DIVISOR.	
0003030010	USING REPEATED SUBTRACTION WITH MULTIPLES OF THE THROUGH 25.	DIVISOR,

E, 1 STEP ADDITION STORY PROBLEMS INVOLVING TIME.

FOR STORY PROBLEMS REQUIRING ADDITION OF 1 OR 2 DIGIT NUMBERS.

DITION OF 2 NUMERALS WITH NO MORE THAN 4 DIGITS.

BASIC FACTS.

E THAN 20 ELEMENTS INTO GROUPS OF EQUIVALENT SETS.

FOR GIVEN NUMBER LINES.

R GIVEN SETS.

O SOLVE BASIC DIVISION EQUATIONS.

SION PROBLEM WITH A 2 DIGIT DIVIDEND AND A 1 DIGIT DIVISOR USING REPEATED

INVERSE OF MULTIPLICATION.

DIVISION.

ISOR.

WITH MULTIPLES OF THE DIVISOR, THE STUDENT WILL SOLVE PROBLEMS WITH DIVIDENDS

0003030011	USE THE DIVISION FACTS THROUGH 45.	
0003030012	FINDS MISSING QUOTIENTS FOR DIVISION EQUATIONS THROUGH	81 DIVIDED BY
0003030013	FINDS TWO AND THREE DIGIT QUOTIENTS THAT ARE MULTIPLES	OF 10 AND 100
0003030014	SOLVES DIVISION EQUATIONS WITHOUT REMAINDERS, USING QUOTIENTS.	STANDARD ALGOR
0003030015	DIVIDE A 3 DIGIT NUMERAL BY A 1 DIGIT NUMERAL (NO	REMAINDER).
0003030016	FIND THE QUOTIENT AND REMAINDER FOR DIVISION PROBLEM	WITH A 2 OR 3
0003030017	SOLVES DIVISION EQUATIONS WITH REMAINDERS, USING QUOTIENTS.	STANDARD ALGOR
0003035	ESTIMATION	
0003035001	ESTIMATE THE SUM OF TWO NUMBERS. FOR EXAMPLE, 287 + 520 IS APPROXIMATE	
0003035002	STUDENT ROUNDS NUMBERS TO TENS AND HUNDREDS IN	ESTIMATING DIF
0003045	FRACTIONS	
0003045001	RESPONDS TO NAMES OF COMMON FRACTIONS.	
0003045002	USES COMMON FRACTIONS IN DIVIDING OBJECTS.	
0003045003	USES COMMON FRACTIONS IN DIVIDING SETS.	

ION EQUATIONS THROUGH 81 DIVIDED BY 9.

TS THAT ARE MULTIPLES OF 10 AND 100; ONE DIGIT DIVISORS.

REMAINDERS, USING STANDARD ALGORITHM. ONE DIGIT DIVISORS, TWO DIGIT

IGIT NUMERAL (NO REMAINDER).

OR DIVISION PROBLEM WITH A 2 OR 3 DIGIT NUMBER BY A 1 DIGIT NUMBER.

MAINDERS, USING STANDARD ALGORITHM. ONE DIGIT DIVISORS, TWO DIGIT

FOR EXAMPLE, 287 + 520 IS APPROXIMATELY 300 + 500 OR 800.

D HUNDREDS IN ESTIMATING DIFFERENCES.

IONS.

OBJECTS.

0003045004	IDENTIFY TWO-THIRDS AND THREE-FOURTHS OF A WHOLE.	REE-F
0003045005	STUDENT IDENTIFIES FIFTHS, SIXTHS, AND EIGHTHS OF SETS	OF OBJECT SIX
0003045006	RELATE THE PROPER FRACTION (HALVES, THIRDS, FOURTHS, GIVEN SET OR FIGURE.	FIFTHS, S (HAL
0003045007	STUDENT IDENTIFIES RATIONAL NUMBERS FOR INDICATING	FIFTHS, S NUM
0003045008	STUDENT WRITES RATIONAL NUMBERS FOR INDICATING FIFTHS,	SIXTHS, A MBERS
0003045009	GIVEN THE FRACTION ONE-HALF, ONE-THIRD, ONE-FOURTH, ONE- SUPPLY A MINIMUM OF TWO EQUIVALENT FRACTIONS FOR EACH.	FIFTH, ONE , ON UIVAL
0003045010	IDENTIFIES FRACTIONS RELATED TO ORDERED PAIRS OF FOURTHS, FIFTHS, SIXTHS, EIGHTHS), WITH ONE AS THE	NUMBERS, R ED TO NUMERATOR IGHTH
0003045011	IDENTIFIES EQUIVALENT FRACTIONS USING VISUAL AIDS.	TIONS
0003045012	SHOW TWO-FOURTHS = ONE-HALF, ETC., BY THE USE OF	PHYSICAL F, FI
0003045013	SHOW TWO-FOURTHS = ONE-HALF, ETC., BY USE OF PICTURES.	F, FI
0003045014	RECOGNIZE GREATER THAN OR LESS THAN FOR THE FRACTIONS (NOTE THAT FRACTIONS IS BEING USED HERE FOR RATIONAL	ONE-FOURTH LESS NUMBERS;. ING L
0003045015	ADD LIKE FRACTIONS WITH DENOMINATORS OF 2,3,4,5,6, OR 8 FRACTIONS.	WHERE BOTH NOMIN
0003045016	SOLVES WORD PROBLEMS INVOLVING FRACTIONS.	VING

REE-FOURTHS OF A WHOLE.

SIXTHS, AND EIGHTHS OF SETS OF OBJECTS.

(HALVES, THIRDS, FOURTHS, FIFTHS, SIXTHS, OR EIGHTHS) TO THE SHADED REGION OF A

NUMBERS FOR INDICATING FIFTHS, SIXTHS, AND EIGHTHS.

MBERS FOR INDICATING FIFTHS, SIXTHS, AND EIGHTHS.

, ONE-THIRD, ONE-FOURTH, ONE- FIFTH, ONE-SIXTH, AND/OR ONE-EIGHTH, THE STUDENT WILL
UIVALENT FRACTIONS FOR EACH.

ED TO ORDERED PAIRS OF NUMBERS, PARTS OF REGIONS AND SETS (HALVES, THIRDS,
IGHTHS), WITH ONE AS THE NUMERATOR AND WITH NUMERATOR GREATER THAN ONE.

TIONS USING VISUAL AIDS.

, ETC., BY THE USE OF PHYSICAL OBJECTS.

, ETC., BY USE OF PICTURES.

LESS THAN FOR THE FRACTIONS ONE-FOURTH, ONE-THIRD, ONE-HALF WITH PHYSICAL OBJECTS.
ING USED HERE FOR RATIONAL NUMBERS).

NOMINATORS OF 2,3,4,5,6, OR 8 WHERE BOTH OF THE ADDENDS AND THE SUM ARE PROPER

VING FRACTIONS.

0003050	GEOMETRY (COORDINATE SYSTEMS)	
0003050001	RECOGNIZE THAT A POINT ON A LINE CAN BE DESCRIBED BY A	NUMBER (COORDI
0003050002	USES COORDINATES (NUMBER PAIRS) TO DETERMINE LOCATIONS	ON A PLANE.
0003050003	GRAPHS GIVEN POINTS IN A PLANE.	
0003055	GEOMETRY (PLANE FIGURES) - ANGLES -	
0003055001	IDENTIFIES A RIGHT ANGLE.	
0003055002	NAMES A RIGHT ANGLE BY THREE POINTS.	
0003060	GEOMETRY (PLANE FIGURES) - CIRCLE -	
0003060001	DRAWS CIRCLE WITHOUT COMPASS.	
0003065	GEOMETRY (PLANE FIGURES) - CONGRUENCE -	
0003065001	RECOGNIZE CONGRUENT ANGLES.	
0003065002	RECOGNIZE THAT A RECTANGULAR SHEET OF PAPER CAN BE FOLDING.	DIVIDED INTO T
0003070	GEOMETRY (PLANE FIGURES) - CONSTRUCTIONS -	
0003070001	FINDS A MID-POINT.	

CAN BE DESCRIBED BY A NUMBER (COORDINATE).

TO DETERMINE LOCATIONS ON A PLANE.

S -

NTS.

E -

UENCE -

ET OF PAPER CAN BE DIVIDED INTO TWO OR MORE CONGRUENT PARTS THROUGH

RUCTIONS -

0003070002	CONSTRUCTS A RIGHT ANGLE IN A CIRCLE.	N A C
0003080	GEOMETRY (PLANE FIGURES) - LINES -	LINE
0003080001	IDENTIFIES PARALLEL LINES.	
0003085	GEOMETRY (PLANE FIGURES) - OPEN/CLOSED FIGURES -	OPEN
0003085001	DESCRIBE A GIVEN GEOMETRIC FIGURE AS BEING OPEN OR CLOSED.	FIGU
0003085002	RECOGNIZE OBJECTS OR DRAWINGS THAT ARE TRIANGLES, QUADRILA	NGS T
0003090	GEOMETRY (PLANE FIGURES) - POLYGONS -	POLY
0003090001	IDENTIFIES PLANE GEOMETRIC FIGURES - TRAPEZOID, PENTAGON,	FIGU
0003090002	ASSOCIATES THE NUMBER OF SIDES OF A POLYGON WITH THE NUMBER OF	IDES
0003090003	FINDS THE SUM OF THE ANGLES OF A TRIANGLE AND A QUADRILAT	S OF
0003090004	USES BASIC FIGURES OF GEOMETRY TO CONSTRUCT ANGLES, TRIANGLES	ETRY
0003095	GEOMETRY (PLANE FIGURES) - QUADRILATERALS -	QUAD
0003095001	FIND THE PERIMETER OF A RECTANGLE OR PARALLELOGRAM,	CTANG

N A CIRCLE.

LINES -

OPEN/CLOSED FIGURES -

FIGURE AS BEING OPEN OR CLOSED.

NGS THAT ARE TRIANGLES, QUADRILATERALS, AND CIRCLES.

POLYGONS -

FIGURES - TRAPEZOID, PENTAGON, AND OTHER REGULAR POLYGONS.

IDES OF A POLYGON WITH THE NUMBER OF DIAGONALS.

S OF A TRIANGLE AND A QUADRILATERAL USING VISUAL AIDS.

ETRY TO CONSTRUCT ANGLES, TRIANGLES, QUADRILATERALS, PARALLELOGRAMS.

QUADRILATERALS -

T OR PARALLELOGRAM.

0003095002 RECOGNIZES THAT BY JOINING MID-POINTS OF A QUADRILATERAL (WITHOUT CROSS INTS

0003095003 GIVEN A PARALLELOGRAM MARKED OFF IN SQUARES, THE STUDENT WILL OETERMINE IN S

0003100 GEOMETRY (PLANE FIGURES) - SETS OF POINTS - F PO

0003100001 LOCATES GIVEN POINTS IN A PLANE.

0003100002 RECOGNIZE THAT MANY LINES MAY PASS THROUGH A POINT. S TH

0003100003 RECOGNIZE THAT THERE IS ONLY ONE LINE THROUGH TWO POINTS. LINE

0003100004 RECOGNIZE THAT TWO LINES CAN INTERSECT AT ONLY ONE POINT. RSEC

0003100005 RECOGNIZE RAYS AND ANGLES.

0003105 GEOMETRY (PLANE FIGURES) - SIMILARITY - RITY

0003105001 RECOGNIZE THAT FIGURES ARE SIMILAR IF THEY HAVE THE SAME SHAPE. FOR EX R IF

0003115 GEOMETRY (PLANE FIGURES) - SYMMETRY - RY -

0003115001 RECOGNIZE SYMMETRY WITH RESPECT TO A LINE BY FOLDING PAPER CONTAINI O A
VERTICAL AXES OF SYMMETRY.

DINTS OF A QUADRILATERAL (WITHOUT CROSSING LINES) A PARALLELOGRAM IS FORMED.

IN SQUARES, THE STUDENT WILL DETERMINE THE NUMBER OF SQUARE UNITS.

F POINTS -

S THROUGH A POINT.

LINE THROUGH TWO POINTS.

RSECT AT ONLY ONE POINT.

RITY -

R IF THEY HAVE THE SAME SHAPE. FOR EXAMPLE, ALL SQUARES ARE SIMILAR.

RY -

O A LINE BY FOLDING PAPER CONTAINING SYMMETRICAL FIGURES ALONG THEIR

0003140	GEOMETRY (SPACE RELATIONSHIPS)	PS)
0003140001	RECOGNIZES INTERIOR AND EXTERIOR OF GEOM RIC FIGURES -	ANGLES, TR ERI
0003140002	DESCRIBE A GIVEN POINT AS BEING INSIDE, ON, OR OUTSIDE	A FIGURE. EIN
0003145	GRAPHS	
0003145001	EXPLAIN SPECIFIC DATA PRESENTED IN A BAR OR PICTURE	GRAPH. NTE
0003145002	CONSTRUCT A PICTURE GRAPH FROM GIVEN DATA.	ROM
0003180	MEASUREMENT (LINEAR)	
0003180001	USES THE TERM SEGMENT, SQUARE, CUBIC TO DISTINGUISH	GIVEN MEAS RE,
0003180002	MEASURES LENGTH TO THE NEAREST HALF INCH.	EST
0003180003	USING A RULER, MEASURE OBJECTS TO THE NEAREST QUARTER	INCH. CTS
0003180004	USES ARBITRARY STANDARD (ENGLISH) UNITS TO MEASURE	LENGTH, AR GLIS
0003180005	USES METRIC UNITS TO MEASURE LENGTH, AREA, VOLUME.	E LE
0003180006	MAKES COMPARISONS OF METRIC AND STANDARD (ENGLISH)	MEASURES. AND
0003180007	GIVEN A SCALE, MEASURE DISTANCES ON A MAP.	ANCE

ERIOR OF GEOMETRIC FIGURES - ANGLES, TRIANGLE, QUADRILATERALS, CIRCLES.

EING INSIDE, ON, OR OUTSIDE A FIGURE.

NTED IN A BAR OR PICTURE GRAPH.

ROM GIVEN DATA.

RE, CUBIC TO DISTINGUISH GIVEN MEASURES.

EST HALF INCH.

CTS TO THE NEAREST QUARTER INCH.

GLISH) UNITS TO MEASURE LENGTH, AREA, VOLUME.

E LENGTH, AREA, VOLUME.

AND STANDARD (ENGLISH) MEASURES.

ANCES ON A MAP.

0003185 MEASUREMENT (LIQUID)

0003185001 MEASURES CAPACITY IN OUNCES, CUPS, PINTS, QUARTS, GALLONS.

0003185002 USE STANDARD UNITS OF MEASURE, SUCH AS CUPS, GALLONS, OUNCES, IN DET

0003205 MEASUREMENT (TEMPERATURE)

0003205001 READS TEMPERATURES USING FAHRENHEIT THERMOMETER.

0003205002 RECORDS TEMPERATURES USING FAHRENHEIT THERMOMETER.

0003205003 FIND THE DIFFERENCE BETWEEN TWO GIVEN TEMPERATURES.

0003210 MEASUREMENT (TIME)

0003210001 IDENTIFIES CALENDAR UNITS, NUMBER OF DAYS IN A WEEK, EACH MONTH.

0003210002 COMPLETES CALENDARS.

0003210003 WRITES DATE IN WORDS.

0003210004 WRITES GIVEN DATE IN NUMERALS.

0003210005 USES VISUAL AIDS IN TIME UNITS.

0003210006 USES MORNING, AFTERNDON, NIGHT, DIVIDING DAY AT NOON AND MIDNIGHT.

0003210007 USES A.M. OR P.M. IN WRITING TIME.

S, PINTS, QUARTS, GALLONS.

UCH AS CUPS, GALLONS, OUNCES, IN DETERMING WEIGHT.

EIT THERMOMETER.

NHEIT THERMOMETER.

GIVEN TEMPERATURES.

? OF DAYS IN A WEEK, EACH MONTH.

DIVIDING DAY AT NOON AND MIDNIGHT.

.

0003210008 READS ANY TIME ON CLOCK FACE.

0003210009 SHOWS ANY TIME USING CLOCK FACE.

0003210010 SOLVES WRITTEN PROBLEMS INVOLVING TIME UNITS.

0003220 MULTIPLICATION

0003220001 MULTIPLY THROUGH SKIP COUNTING TO INTRODUCE AN ELEMENT OF LOGIC

0003220002 MULTIPLY THROUGH NUMBER LINES, TO INTRODUCE AN ELEMENT OF LOGIC

0003220003 USES REPEATED ADDITION TO SOLVE MULTIPLICATION PROBLEMS. ONE DIGIT

0003220004 USE THE NUMBER LINE TO ILLUSTRATE MULTIPLICATION PROBLEMS.

0003220005 THE STUDENT WILL NAME MULTIPLICATION FACTS THROUGH FIVE.

0003220006 USE THE MULTIPLICATION FACTS WITH PRODUCTS THROUGH 45.

0003220007 DISCOVER NUMBER PATTERNS FROM MULTIPLICATION TABLES.

0003220008 TELL THE MULTIPLICATION FACTS OF 1 DIGIT FACTORS WHERE AT LEAST

0003220009 TELL THE MULTIPLICATION FACTS OF 1 DIGIT NUMBERS.

0003220010 FINDS UNKNOWN FACTS FROM KNOWN FACTS.

ACE.

LVING TIME UNITS.

NG TO INTRODUCE AN ELEMENT OF LOGIC IN FINDING PRODUCTS.

S. TO INTRODUCE AN ELEMENT OF LOGIC IN FINDING PRODUCTS.

LVE MULTIPLICATION PROBLEMS. ONE DIGIT FACTORS.

TRATE MULTIPLICATION PROBLEMS.

LICATION FACTS THROUGH FIVE.

WITH PRODUCTS THROUGH 45.

M MULTIPLICATION TABLES.

S OF 1 DIGIT FACTORS WHERE AT LEAST ONE OF THE FACTORS IS LESS THAN 6.

S OF 1 DIGIT NUMBERS.

NN FACTS.

0003220011	USES MULTIPLICATION ALGORITHM TO FIND A ONE DIGIT	FACTOR TIMES
0003220012	USES ZERO (IDENTITY) AND ONE PRINCIPLE FOR	MULTIPLICATIO
0003220013	USES THE COMMUTATIVE PRINCIPLE FOR MULTIPLICATION.	
0003220014	USES THE ASSOCIATIVE PRINCIPLE FOR MULTIPLICATION.	
0003220015	WRITES MULTIPLICATION EQUATIONS FOR GIVEN SETS, NUMBER	LINES, PAIRS.
0003220016	MULTIPLY A 2 DIGIT OR 3 DIGIT NUMERAL BY A 1 DIGIT	NUMERAL WHERE
0003220017	SOLVE WORD PROBLEMS USING MULTIPLICATION WHERE THE	PRODUCT IS NO
0003220018	MULTIPLY A 2 OR 3 DIGIT NUMERAL BY A 1 DIGIT NUMERAL	WHERE REGROUP
0003220019	MULTIPLIES A ONE DIGIT FACTOR TIMES THREE AND FOUR DIGIT	FACTORS.
0003220020	MULTIPLY MENTALLY BY 10 AND 100.	
0003220021	FINDS PRODUCTS USING 10 AND 100 AS FACTORS.	
0003220022	FINDS PRODUCTS USING MULTIPLES OF 10 AND 100 AS FACTORS.	
0003220023	USES ESTIMATES OF MULTIPLES OF 10 AND 100 TO FIND	PRODUCTS.
0003220024	USES DISTRIBUTIVE PRINCIPLE.	

TO FIND A ONE DIGIT	FACTOR TIMES A TWO DIGIT FACTOR.
RINCIPLE FOR	MULTIPLICATION.
FOR MULTIPLICATION.	
FOR MULTIPLICATION.	
S FOR GIVEN SETS, NUMBER	LINES, PAIRS. ONE DIGIT FACTORS.
NUMERAL BY A 1 DIGIT	NUMERAL WHERE REGROUPING IS NOT REQUIRED.
PLICATION WHERE THE	PRODUCT IS NOT GREATER THAN 25.
BY A 1 DIGIT NUMERAL	WHERE REGROUPING IS REQUIRED.
IMES THREE AND FOUR DIGIT	FACTORS.
.	
AS FACTORS.	
OF 10 AND 100 AS FACTORS.	
10 AND 100 TO FIND	PRODUCTS.

0003225 NUMBER SENTENCES

0003225001 USE MANY DIFFERENT KINDS OF PLACEHOLDERS , IKE X, Y, N, IN MATHEM PLAC

0003225002 USE SENTENCES LIKE 3 X 4 = X, * X 7 = 14, AND 4 X * = 12 TO REPR , ,

0003225003 PLACE THE CORRECT SYMBOL (LESS THAN, GREATER THAN, =) IN THE PLACEH SS
42 X 87 = 28, AND 65 = 39 X 5 X 7. 5 X

0003225004 DETERMINE BETWEENNESS, GREATER THAN, OR LESS THAN FOR NUMBERS TH FR

0003225005 USES LESS THAN, GREATER THAN, =, TO DISTINGUISH BETWEEN NUMERALS O , =,

0003225006 GIVEN ADDITION AND SUBTRACTION STORY PROBLEMS, WRITE THEM AS NU ON S

0003230 NUMBER SYSTEMS (EARLY)

0003230001 READ ROMAN NUMERALS THROUGH X (10). X (1

0003230002 WRITE ROMAN NUMERALS TO X (10). 0).

0003230003 MATCH ARABIC NUMERALS 1, 5, 10 TO ROMAN NUMERALS I, V, X. 10 T

0003230004 STUDENT WILL IDENTIFY THE ROMAN NUMERALS FROM 1-50 IN ANY GIVEN MAN

0003230005 STUDENT WILL LIST THE ROMAN NUMERALS FROM 1-50. NUME

0003240 NUMBERS (PRIME - COMPOSITE)

0003240001 IDENTIFIES PRIME NUMBERS LESS THAN 32. S TH

MA PLACEHOLDERS , IKE X, Y, N, IN MATHEMATICAL SENTENCES.

PR , * X 7 = 14, AND 4 X * = 12 TO REPRESENT PHYSICAL SITUATIONS.

EH SS THAN, ^REATER THAN, =) IN THE PLACEHOLDER IN SENTENCES SUCH AS 3 X 5 X 7 * 8, 25 +
5 X 7.

TH FR THAN, OR LESS THAN FOR NUMBERS THROUGH 999.

O , =, TO DISTINGUISH BETWEEN NUMERALS OF ONE TO FOUR DIGITS.

NU ON STORY PROB.EMS, WRITE THEM AS NUMBER SENTENCES. TO 3 DIGITS.

X (10).

0).

10 TO ROMAN NUMERALS I, V, X.

MAN NUMERALS FROM 1-50 IN ANY GIVEN ORDER.

N NUMERALS FROM 1-50.

S THAN 32.

0003255	NUMERALS
0003255001	USE ORDINAL NUMBERS BEYOND TENTH.
0003255002	WRITE MANY SYMBOLS FOR THE SAME NUMBER, SUCH AS 7 + 5, 4 X 3, 10 + 2
0003255003	RECOGNIZE THAT NUMERALS SUCH AS 57 CAN BE EXPRESSED AS 40 + 17.
0003255004	IDENTIFIES EVEN NUMBERS.
0003255005	IDENTIFIES ODD NUMBERS.
0003255006	WRITES NUMERALS TO 9,999 IN NUMERALS.
0003255007	WRITES NUMERALS TO 9,999 IN WORDS.
0003255008	COUNTS, TO 999,999.
0003255009	READS TO 999,999.
0003255010	WRITES TO 999,999.
0003255011	STUDENT READS NUMBER WORDS TO MILLIONS.
0003255012	STUDENT WRITES NUMBER WORDS TO MILLIONS.
0003270	PLACE VALUE
0003270001	REWRITE 3 DIGIT NUMBERS ROUNDING OFF TO THE NEAREST TEN OR HUNDRED.

H.

NUMBER, SUCH AS 7 + 5, 4 X 3, 10 + 2, AND 12 FOR TWELVE.

57 CAN BE EXPRESSED AS 40 + 17.

ERALS.

DS.

ILLIONS.

MILLIONS.

G OFF TO THE NEAREST TEN OR HUNDRED.

[illegible]	TELL THE VALUE OF EACH DIGIT IN A 4 DIGIT NUMBER.	GIT
[illegible]	WRITE FOUR-DIGIT NUMERALS IN EXPANDED NOTATION; FOR EXAMPLE,	IN
[illegible]	NAMES ONE HUNDRED AS 10 TENS, ONE THOUSAND AS 10 HUNDREDS.	ENS/
[illegible]	ADDS ONE MORE TEN, ONE MORE HUNDRED, TO A THREE OR FOUR DIGIT NUM	RE H
[illegible]	INTERPRET PLACE VALUE TO 10,000.	10,0
[illegible]	INDENTIFIES PLACE VALUE DIGIT TO 999,999 AS ONES, TENS, HUNDREDS,	IGIT
[illegible]	GIVEN THE PLACE VALUE NAMES, THE STUDENT WILL EXPRESS ANY GIVEN	ES,
0003270009	THE STUDENT USES COMMAS TO INDICATE PERIODS TO MILLIONS.	O IN
[illegible]	NAME DIGITS BY PLACE VALUE THROUGH ONE HUNDRED MILLION.	E TH
[illegible]	GIVEN ANY NUMERAL TO MILLIONS, THE STUDENT WILL STATE THE RELATI POSITION TO ITS LEFT.	IONS

0003285	RATIO	
0003285001	INTERPRET SIMPLE RATIO SITUATIONS, SUCH AS 2 APPLES FOR	FOR 15 CEN TUAT
0003285002	RECOGNIZE THAT RATIOS SUCH AS 8 TO 20 AND 4 TO 10 ARE	EQUIVALENT H AS

GIT IN A 4 DIGIT NUMBER.

IN EXPANDED NOTATION; FOR EXAMPLE, 4567 = 4000 + 500 + 60 + 7.

ENS, ONE THOUSAND AS 10 HUNDREDS.

RE HUNDRED, TO A THREE OR FOUR DIGIT NUMERAL.

10,000.

IGIT TO 999,999 AS ONES, TENS, HUNDREDS, THOUSANDS.

ES, THE STUDENT WILL EXPRESS ANY GIVEN NUMBER THROUGH MILLIONS.

O INDICATE PERIODS TO MILLIONS.

E THROUGH ONE HUNDRED MILLION.

IONS, THE STUDENT WILL STATE THE RELATIONSHIP BETWEEN ANY ONE POSITION AND THE

TUATIONS, SUCH AS 2 APPLES FOR FOR 15 CENTS, WRITTEN. 2/15.

AS 8 TO 20 AND 4 TO 10 ARE EQUIVALENT RATIOS (REPRESENT THE SAME RATE).

0003295	SETS	
0003295001	RECOGNIZE A NUMBER AS BEING GREATER THAN, EQUAL TO, OR	LESS THAN A SE ATER
0003295002	EXPRESS A SET OF ELEMENTS IN SET NATATION AND CONCLUDE	IF THE TWO SETS NA
0003295003	DEFINE THE SUBSETS OF A GIVEN SET.	T.
0003295004	DESCRIBE THE UNION OF TWO SETS.	
0003295005	FINDS UNION OF SETS.	
0003295006	DEMONSTRATE WITH SETS OF OBJECTS THE RELATIONSHIP 28 / 7 = 4.	BETWEEN SUCH SE THI
0003295007	GIVEN ANY TWO SETS, THE STUDENT WILL NAME THE CROSS	PRODUCTS. WILL
0003315	SUBRRACTION	
0003315001	RECOGNIZES SUBTRACTION AS THE INVERSE OF ADDITION.	VERS
0003315002	WRITES RELATED SUBTRACTION EQUATIONS FOR GIVEN SETS.	IONS
0003315003	WRITES RELATED SUBTRACTION EQUATIONS FOR GIVEN	NUMBER LINES. IONS
0003315004	SUBTRACT A 2 OR 3 DIGIT NUMERAL FROM A 3 DIGIT NUMERAL	WITHOUT REGROUP FROM
0003315005	STUDENT USES THE VERTICAL ALGORISM TO SOLVE SUBTRACTION	PROBLEMS OF THR SM T
0003315006	SUBTRACTS MULTI-DIGITED NUMERALS. NO GROUPING.	. N

ATER THAN, EQUAL TO, OR LESS THAN A SECOND NUMBER.

NATATION AND CONCLUDE IF THE TWO SETS ARE EQUIVALENTS.

ET.

THE RELATIONSHIP BETWEEN SUCH SENTENCES AS 4 X 7 = 28, 28 / 4 = 7 AND

WILL NAME THE CROSS PRODUCTS.

VERSE OF ADDITION.

IONS FOR GIVEN SETS.

IONS FOR GIVEN NUMBER LINES.

FROM A 3 DIGIT NUMERAL WITHOUT REGROUPING.

SM TO SOLVE SUBTRACTION PROBLEMS OF THREE AND FOUR DIGIT NUMERALS.

. NO GROUPING.

0003315007 SUBTRACTS, REGROUPING TENS AS ONES OR HUNDREDS AS TENS. TWO, THREE AS C

0003315008 RECOGNIZES SUBTRACTION-OPERATION. ONE-STEP AND TWO AND THREE STEP ATIO

0003315009 SOLVES WRITTEN SUBTRACTION PROBLEMS; ONE-STEP AND TWO AND THREE PROB

0003315010 SOLVE WORD PROBLEMS FOR SUBTRACTION OF 2 NUMERALS WITH NO MORE TH RAC

0003315011 WRITE AND SOLVE EQUATIONS FOR STORY PROBLEMS REQUIRING SUBTRACTIO R S

0003320 SUBTRACTION (WORD PROBLEMS)

0003320001 SOLVE TO THE NEAREST MINUTE, 1 STEP SUBTRACTION STORY PROBLEMS I 1

0003325 VALUE OF COINS

0003325001 IDENTIFIES PENNY AS REPRESENTING THE ONES DIGIT AND DIME AS REPRESE NTIN

0003325002 CONVERTS VALUES IN CENTS TO DOLLARS AND CENTS, USING THE USUAL DECI DOL

0003325003 GIVES VALUE OF COIN COLLECTIONS IN CENTS. ONS

0003325004 INDICATES CHANGE.

0003325005 MAKE CHANGE FOR ANY PURCHASE UP TO $1.00. UP

0003325006 COUNTS CHANGE STARTING WITH THE TOTAL VALUE OF THE PURCHASE. THE

AS ONES OR HUNDREDS AS TENS. TWO, THREE, FOUR DIGIT NUMERALS.

ATION. ONE-STEP AND TWO AND THREE STEPS WHEN STEPS ARE INDICATED.

PROBLEMS; ONE-STEP AND TWO AND THREE STEPS WHEN STEPS ARE INDICATED.

RACTION OF 2 NUMERALS WITH NO MORE THAN 4 DIGITS.

OR STORY PROBLEMS REQUIRING SUBTRACTION OF 1 OR 2 DIGIT NUMBERS.

1 STEP SUBTRACTION STORY PROBLEMS INVOLVING TIME.

NTING THE ONES DIGIT AND DIME AS REPRESENTING THE TENS DIGIT.

DOLLARS AND CENTS, USING THE USUAL DECIMAL NOTATION.

IONS IN CENTS.

UP TO $1.00.

THE TOTAL VALUE OF THE PURCHASE.

0003325007	IDENTIFIES CHANGE IN COINS WITH PURCHASE AMOUNTS LESS	THAN $10.00.
0003325008	ADDS, MONEY VALUES, USING CENT AND DECIMA. NOTATION TO	$10.00.
0003325009	SUBTRACTS MONEY VALUES, USING CENT AND DECIMAL NOTATION	TO $10.00.

0004005	ADDITION	
0004005001	STUDENT IDENTIFIES AND ILLUSTRATES PROPERTIES OF WHOLE NUMBERS	TRAT
0004005002	DO COLUMN ADDITION WITH SEVERAL FOUR-PLACE OR FIVE-PLACE ADDENDS.	RAL
0004005003	ADDS, WITH REGROUPING, MULTI-DIGITED NUMBERS, MULTIPLE ADDENDS.	-DIG
0004020	CLOCK MODULO) ARITHEMATIC	
0004020001	GIVEN ADDITION, SUBTRACTION, AND MULTIPLICATION ARITHMETIC,	PROBLEMS AND
0004025	DECIMALS	
0004025001	SOLVE WORD PROBLEMS WHICH REQUIRE DIVISION OF A DECIMAL BY A WHO	QUIR
0004030	DIVISION	
0004030001	USE THE NUMBER LINE TO ILLUSTRATE DIVISION PROBLEMS.	TRATE
0004030002	ACCURATELY SOLVE DIVISION PROBLEMS BY USING REPEATED	SUBTRACTI ORLEN
0004030003	USE THE SUBTRACTIVE DIVISION ALGORITHM WITH TWO-PLACE	DIVISORS ALGO
0004030004	USE SENTENCES LIKE * X 5 = 45 + 5 = X TO SHOW DIVISION	AS THE IN 5 + 5
0004030005	RECOGNIZE GROUPS OF EQUIVALENT SETS IN OPERATIONS	INVOLVING NT SE

TRATES PROPERTIES OF WHOLE NUMBERS UNDER ADDITION.

RAL FOUR-PLACE OR FIVE-PLACE ADDENDS.

-DIGITED NUMBERS. MULTIPLE ADDENDS. USES ADDITION ALGORITHM.

AND MULTIPLICATION PROBLEMS. STUDENTS CAN SOLVE THEM USING CLOCK

QUIRE DIVISION OF A DECIMAL BY A WHOLE NUMBER.

TRATE DIVISION PROBLEMS.

OBLEMS BY USING REPEATED SUBTRACTION.

ALGORITHM WITH TWO-PLACE DIVISORS ENDING IN 1, 2, 3, 4.

5 ÷ 5 = X TO SHOW DIVISION AS THE INVERSE OF MULTIPLICATION.

NT SETS IN OPERATIONS INVOLVING DIVISION.

0004030006	RECOGNIZE THE SPECIAL ROLE OF 1 AS A DIVISOR.		1 A
0004030007	EXHIBITS MASTERY OF DIVISION FACTS THROUGH 144 DIVIDED	BY 12.	FACT
0004030008	USES DIVISION ALGORITHM WITH ONE DIGIT DIVISOR, MULTI-	DIGITED QUOTIE	ONE
0004030009	CHECKS DIVISION PROBLEMS BY INVERSE OPERATION OF	MULTIPLICATION	NVER
0004030010	FINDS ONE AND TWO DIGIT QUOTIENTS WHEN DIVISOR IS A TWO	DIGIT MULTIPLE	ENTS
0004030011	SOLVES DIVISION EQUATIONS INVOLVING TWO-DIGIT DIVISORS,	ONE-DIGIT QUOT	OLVI
0004030012	FINDS AVERAGES; ONE DIGIT DIVISOR, TWO DIGIT QUOTIENT.		VISO
0004030013	SOLVES DIVISION EQUATIONS INVOLVING TWO-DIGIT DIVISORS,	ONE-DIGIT QUOT	OLVI
0004035	ESTIMATION		
0004035001	USES ESTIMATION TO FIND MISSING FACTORS; MULTIPLES OF	10 AND 100.	NG F
0004035002	ESTIMATES PRODUCTS BY ROUNDING TO APPROPRIATE PLACES.		G TO
0004035003	ESTIMATES QUOTIENTS BY ROUNDING TO APPROPRIATE PLACES.		NG T
0004035004	ESTIMATE THE PRODUCT OF TWO NUMBERS AND THE QUOTIENT OF X 90 OR 1800 AND 795 ÷ 23 IS APPROXIMATELY 800 ÷ 20 OR	TWO NUMBERS. 16000.	UMBE PPR

1 AS A DIVISOR.

FACTS THROUGH 144 DIVIDED BY 12.

ONE DIGIT DIVISOR, MULTI- DIGITED QUOTIENT.

NVERSE OPERATION OF MULTIPLICATION.

FNTS WHEN DIVISOR IS A TWO DIGIT MULTIPLE OF 10.

OLVING TWO-DIGIT DIVISORS, ONE-DIGIT QUOTIENTS, WITH REMAINDER.

VISOR, TWO DIGIT QUOTIENT.

OLVING TWO-DIGIT DIVISORS, ONE-DIGIT QUOTIENTS, WITHOUT REMAINDER.

NG FACTORS; MULTIPLES OF 10 AND 100.

G TO APPROPRIATE PLACES.

NG TO APPROPRIATE PLACES.

UMBERS AND THE QUOTIENT OF TWO NUMBERS. FOR EXAMPLE, 21 X 88 IS APPROXIMATELY 20
APPROXIMATELY 800 ÷ 20 OR 16000.

0004045	FRACTIONS	
000404500:	TELL WHAT THE PARTS OF A FRACTION SYMBOL STANDS FOR.	
0004045002	USES NUMERATOR, DENOMINATOR TO IDENTIFY FRACTIONAL	PARTS.
0004045003	RECOGNIZE THAT A GIVEN FRACTION IS THE SAME AS A GIVEN	PICTURE O
000404500?	WRITE THE FRACTION SYMBOL FOR A GIVEN PART OF A WHOLE.	
0004045005	GIVEN A PICTURE OF A FRACTION AND ITS FRACTION SYMBOL, PICTURE INTO SMALLER EQUAL PARTS AND WRITING THE NEW	DEMONSTRA SYMBOL.
0004045006	GIVEN A LINE SEGMENT DIVIDED INTO EQUAL PARTS AND A YOUR KNOWLEDGE OF FRACTIONS BY DIVIDING THE LINE SEGMENT	FRACTION INTO SMA
0004045007	GIVEN TWO DIFFERENT FRACTIONS EACH OF WHICH IS LESS	THAN ONE.
0004045008	WRITE THE FRACTION THAT EXPRESSES THE RELATIONSHIP	BETWEEN P
.0004045009	WRITE AT LEAST THREE FRACTIONS FOR A GIVEN WHOLE NUMBER	ON THE NU
0004045010	GIVEN A POINT TO THE LEFT OF 1 ON THE NUMBER LINE, WRITE NUMBER LINE.	AT LEAST
0004045011	WRITE A FRACTION FOR A GIVEN POINT TO THE RIGHT OF	NUMBER 1
0004045012	WRITE AN IMPROPER FRACTION FOR A GIVEN PICTURE THAT	SHOWS A FR
0004045013	EXPRESS A GIVEN IMPROPER FRACTION AS A WHOLE NUMBER	AND A FRAC
0004045014	DETERMINES WHETHER A FRACTION IS IN LOWEST TERMS.	

ACTION SYMBOL STANDS FOR.

TO IDENTIFY FRACTIONAL PARTS.

TION IS THE SAME AS A GIVEN PICTURE OF THE FRACTION.

OR A GIVEN PART OF A WHOLE.

ON AND ITS FRACTION SYMBOL, DEMONSTRATE YOUR KNOWLEDGE OF FRACTIONS BY DIVIDING THE PARTS AND WRITING THE NEW SYMBOL.

O INTO EQUAL PARTS AND A FRACTION SYMBOL THAT NAMES A SECTION OF IT, DEMONSTRATE BY DIVIDING THE LINE SEGMENT INTO SMALLER EQUAL PARTS AND WRITING THE NEW SYMBOL.

NS EACH OF WHICH IS LESS THAN ONE, WRITE THEM IN ORDER ON THE NUMBER LINE.

RESSES THE RELATIONSHIP BETWEEN PART OF A LINE SEGMENT AND THE WHOLE SEGMENT.

ONS FOR A GIVEN WHOLE NUMBER ON THE NUMBER LINE.

1 ON THE NUMBER LINE, WRITE AT LEAST THREE FRACTIONS THAT NAME THAT POINT ON THE

N POINT TO THE RIGHT OF NUMBER 1 ON THE NUMBER LINE.

FOR A GIVEN PICTURE THAT SHOWS A FRACTION GREATER THAN 1,

ACTION AS A WHOLE NUMBER AND A FRACTION.

N IS IN LOWEST TERMS,

0004045015	WRITE A SET OF AT LEAST THREE FRACTIONS THAT ARE EQUAL A GIVEN FRACTION BY THE SAME NUMBER.	TO EACH OTHER
0004045016	BUILDS SETS OF EQUIVALENT FRACTIONS FROM A GIVEN	FRACTION AND U
0004045017	IDENTIFIES FRACTIONS RELATED TO ORDERED PAIRS OF FOURTHS) WITH ONE AS THE NUMERATOR AND WITH NUMERATORS	NUMBERS, PARTS GREATER THAN O
0004045018	SOLVES WORD PROBLEMS INVOLVING FRACTIONS IN LOWEST	TERMS.
0004045019	SOLVES WORD PROBLEMS INVOLVING EQUIVALENT FRACTIONS.	
0004045020	STUDENT ADDS AND SUBTRACTS PROPER FRACTIONS HAVING LIKE	DENOMINATORS.
0004045021	SOLVES ADDITION EQUATIONS INVOLVING LIKE FRACTIONS AND	MIXED FRACTION
0004050	GEOMETRY (COORDINATE SYSTEMS)	
0004050001	RECOGNIZE THAT A LINE SEGMENT IS A SET OF POINTS.	
0004050002	USES TERMS GRAPH, AXIS, COORDINATE AXES, WHEN GRAPHING	NUMBER PAIRS.
0004050003	RECOGNIZE THAT POINTS IN A PLANE (THE FIRST QUADRANT) (COORDINATES).	CAN BE REPRESE
0004050004	GRAPHS SETS OF COORDINATES (FUNCTIONS). OBSERVES	PATTERN.
0004055	GEOMETRY (PLANE FIGURES) - ANGLES -	
4055001	GIVEN 2 LINES THAT CROSS EACH OTHER, FIND THE EQUAL	ANGLES.

RACTIONS THAT ARE EQUAL MBER.	TO EACH OTHER BY MULTIPLYING THE TOP AND THE BOTTOM OF
ONS FROM A GIVEN	FRACTION AND USES CROSS PRODUCT METHOD TO CHECK.
ORDERED PAIRS OF FOR AND WITH NUMERATORS	NUMBERS, PARTS OF REGIONS, AND SETS (THROUGH TWENTY- GREATER THAN ONE.
RACTIONS IN LOWEST	TERMS.
QUIVALENT FRACTIONS.	
R FRACTIONS HAVING LIKE	DENOMINATORS.
ING LIKE FRACTIONS AND	MIXED FRACTIONS.
A SET OF POINTS,	
TE AXES, WHEN GRAPHING	NUMBER PAIRS.
(THE FIRST QUADRANT)	CAN BE REPRESENTED BY (ORDERED) PAIRS OF NUMBERS
CTIONS . OBSERVES	PATTERN.
S -	
HER, FIND THE EQUAL	ANGLES.

0004055002	GIVEN ANGLES, THE STUDENT WILL IDENTIFY BY NON-METRIC	JUDGMENT,
0004060	GEOMETRY (PLANE FIGURES) - CIRCLE -	
0004060001	IDENTIFY THE FOLLOWING PARTS OF A GIVEN CIRCLE: CENTER, RADIUS, D	
0004060002	LOCATES PARTS - CENTER RADIUS, DIAMETER, CHORD OF A	CIRCLE.
0004060003	IDENTIFIES CENTRAL AND INSCRIBED ANGLES, INSCRIBED	CIRCLES, C
0004060004	RECOGNIZES A TANGENT TO A CIRCLE.	
0004065	GEOMETRY (PLANE FIGURES) - CONGRUENCE -	
0004065001	RECOGNIZE CONGRUENT ANGLES.	
0004070	GEOMETRY (PLANE FIGURES) - CONSTRUCTIONS -	
0004070001	REPRODUCE A LINE SEGMENT BY USING A COMPASS AND STRAIGHT EDGE.	
0004070002	BISECT A LINE SEGMENT BY USING A COMPASS AND STRAIGHT-	EDGE.
0004070003	DEMONSTRATE THROUGH PAPER FOLDING AN UNDERSTANDING OF A	LINE AS AN
0004070004	GIVEN THE RADIUS OR THE DIAMETER OF A CIRCLE, CONSTRUCT	THE CIRCLE

WILL IDENTIFY BY NON-METRIC JUDGMENT, THOSE WHICH ARE RIGHT ANGLES.

CIRCLE -

'S OF A GIVEN CIRCLE: CENTER, RADIUS, DIAMETER, CHORD.

IUS, DIAMETER, CHORD OF A CIRCLE.

CRIBED ANGLES, INSCRIBED CIRCLES, CIRCUMSCRIBED CIRCLE.

IRCLE.

CONGRUENCE -

CONSTRUCTIONS -

USING A COMPASS AND STRAIGHT EDGE.

SING A COMPASS AND STRAIGHT- EDGE.

OLDING AN UNDERSTANDING OF A LINE AS AN INTERSECTION OF TWO PLANES.

METER OF A CIRCLE, CONSTRUCT THE CIRCLE.

0004070005	CONSTRUCT A CIRCLE THROUGH THREE GIVEN POINTS THAT ARE NOT IN A STRAI GIVEN TRIANGLE.	
0004070006	CONSTRUCT CENTRAL AND INSCRIBED ANGLES, INSCRIBED	CIRCLES, CIRCU ANGL
0004090	GEOMETRY (PLANE FIGURES) - POLYGONS -	ONS
0004090001	RECOGNIZE ISOSCELES AND EQUILATERAL TRIANGLES AND	PARALLELOGRAMS RAL
0004090002	MEASURE PERIMETERS OF TRIANGLES AND QUADRILATERALS.	AND
0004090003	FINDS PERIMETER OF POLYGONS BY MEASURING.	EASU
0004090004	FIND THE SUM OF THE MEASURES OF THE ANGLES OF A GIVEN	TRIANGLE OR OF THE
0004090005	FIND AND DESCRIBE THE VERTICES AND THE DIAGONALS OF A	GIVEN POLYGON. ND T
0004095	GEOMETRY (PLANE FIGURES) - QUADRILATERALS -	ILAT
0004095001	RECOGNIZE THE FIGURE FORMED BY JOINING THE MIDPOINTS OF	THE FOUR SIDES OINI
0004100	GEOMETRY (PLANE FIGURES) - SETS OF POINTS -	OF P
0004100001	RECOGNIZE A PLANE AS A FLAT SURFACE WHICH CONTAINS LINES AND POINTS.	ACE
0004100002	RECOGNIZE AND DESCRIBE A POINT, A LINE, AND A PLANE.	A LI

GIVEN POINTS THAT ARE NOT IN A STRAIGHT LINE, AND INSCRIBE A CIRCLE IN A

ANGLES, INSCRIBED CIRCLES, CIRCUMSCRIBED CIRCLE.

ONS -

RAL TRIANGLES AND PARALLELOGRAMS.

AND QUADRILATERALS.

EASURING.

THE ANGLES OF A GIVEN TRIANGLE OR OF A GIVEN QUADRILATERAL WITHOUT MEASURING.

ND THE DIAGONALS OF A GIVEN POLYGON.

ILATERALS -

OINING THE MIDPOINTS OF THE FOUR SIDES OF A GIVEN QUADRILATERAL.

OF POINTS -

ACE WHICH CONTAINS LINES AND POINTS.

A LINE, AND A PLANE.

0004100003	RECOGNIZE AND DESCRIBE A LINE SEGMENT AND AN ANGLE.	SE(
0004100004	IDENTIFIES A SIMPLE CLOSED CURVE AS A REGION OF A PLANE.	RVE
0004100005	RECOGNIZE PARALLEL LINES AS LINES IN A PLANE WHICH DO NOT INTER	INES
0004100006	INTERPRET A CIRCLE AS THE SET OF ALL POINTS IN A PLANE THAT ARE	OF
0004105	GEOMETRY (PLANE FIGURES) - SIMILARITY -	MILA
0004105001	RECOGNIZE THAT ALL CONGRUENT FIGURES ARE SIMILAR BUT NOT ALL SIMIL	FIGU
0004115	GEOMETRY (PLANE FIGURES) - SYMMETRY -	MMET
0004115001	RECOGNIZE THAT SOME FIGURES HAVE TWO OR MORE AXES OF SYMMETRY	AVE
0004130	GEOMETRY (SIZE AND SHAPE)	
0004130001	GIVEN A GROUP OF OBJECTS OR PICTURES, STUDENTS CAN ACCURATEL OF MEASURE.	ICTU
0004130002	GIVEN A GROUP OF OBJECTS OR PICTURES, STUDENTS CAN ACCURATEL MEASURE.	ICTU
0004130003	FIND AREAS OF SIMPLE REGIONS INFORMALLY; FOR EXAMPLE, A RECTANGUL CAN BE COVERED BY SIX ONE-INCH SQUARES (REGIONS).	INFO H SQ
0004130004	GIVEN A GROUP OF OBJECTS OR PICTURES, STUDENTS CAN ACCURATEL MEASURE.	ICTU

SEGMENT AND AN ANGLE.

RVE AS A REGION OF A PLANE.

INES IN A PLANE WHICH DO NOT INTERSECT.

OF ALL POINTS IN A PLANE THAT ARE AT THE SAME DISTANCE FROM A FIXED POINT.

MILARITY -

FIGURES ARE SIMILAR BUT NOT ALL SIMILAR FIGURES ARE CONGRUENT.

MMETRY -

AVE TWO OR MORE AXES OF SYMMETRY THROUGH PAPER FOLDING.

ICTURES, STUDENTS CAN ACCURATELY ESTIMATE THE LENGTH USING THE CORRECT UNITS

ICTURES, STUDENTS CAN ACCURATELY ESTIMATE AREA USING THE CORRECT UNITS OF

INFORMALLY; FOR EXAMPLE, A RECTANGULAR REGION WITH DIMENSIONS 2 INCHES BY 3 INCHES
H SQUARES (REGIONS).

ICTURES, STUDENTS CAN ACCURATELY ESTIMATE VOLUME USING THE CORRECT UNITS OF

0004135	GEOMETRY (SOLIOS)	
0004135001	IDENTIFIES THE FACE, EOGE, VERTEX OF A CUBE AND	TRIANGULAR PYR
0004135002	CONSTRUCTS MOOELS FROM GIVEN PATTERN FOR CUBE AND	TRIANGULAR PYR
0004135003	IDENTIFIES CYLINOER, CONE.	
0004135004	CONSTRUCTS MOOEL FROM GIVEN PATTERN FOR CYLINDER AND	CONE.
0004140	GEOMETRY (SPACE RELATIONSHIPS)	
0004140001	INTERPRET SPACE AS THE SET OF ALL POINTS.	
0004140002	DESCRIBE LINES AS INTERSECTIONS OF PLANES.	
0004150	INVERSE (AOOITIVE)	
0004150001	RECOGNIZE THE INVERSE RELATION BETWEEN ADDITION SENTENCES AND 342 = 1067 AND 1067 - 725 = 342, AND 1067 - 342 = 725.	
0004165	MEASUREMENT (AREA)	
0004165001	USES ARBITRARY STANOARO METRIC UNITS TO MFASURE AREA.	
0004170	MEASUREMENT (ORY)	
0004170001	SOLVES PROBLEMS USING CONVERSIONS OF DRY MEASURES	(OUNCES, POUNO

EX OF A CUBE AND TRIANGULAR PYRAMID.

TTERN FOR CUBE AND TRIANGULAR PYRAMID.

TERN FOR CYLINDER AND CONE.

LL POINTS.

OF PLANES.

BETWEEN ADDITION SENTENCES AND TWO SUBTRACTION SENTENCES, SUCH AS 725 +
, AND 1067 - 342 = 725.

UNITS TO MEASURE AREA.

NS OF DRY MEASURES (OUNCES, POUNDS, PECKS, BUSHELS, TONS).

0004180	MEASUREMENT (LINEAR)	
0004180001	USES ARIBITRARY STANDARD (ENGLISH) UNITS TO MEASURE	LENGTH.
0004180002	USES METRIC UNITS TO MEASURE LENGTH.	
0004180003	SOLVES PROBLEMS USING CONVERSIONS OF LINEAR MEASURES	(INCHES, F
0004185	MEASUREMENT (LIQUID)	
0004185001	EXPRESS DIFFERENT NAMES FOR THE SAME MEASURE.	
0004185002	SOLVES PROBLEMS USING CONVERSIONS OF LIQUID MEASURES	(TABLESPOO
0004210	MEASUREMENT (TIME)	
0004210001	READS TIME ON CLOCK WITH SECOND HAND.	
0004210002	IDENTIFIES EQUIVALENT VALUES FOR DECADE, CENTURY,	NUMBER OF
0004210003	SOLVES WRITTEN PROBLEMS INVOLVING ADDITION AND REGROUPINGS.	SUBTRACTIO
0004210004	SOLVE PROBLEMS INVOLVED IN CONVERTING DAYS TO WEEKS,	HOURS TO D
0004210005	SOLVES PROBLEMS IN READING BUS, TRAIN, PLANE SCHEDULES.	
0004210006	NAMES VERY SMALL, VERY LARGE TIME UNITS (SECONDS,	MILLENIUM)

GLISH; UNITS TO MEASURE LENGTH.

LENGTH.

SIONS OF LINEAR MEASURES (INCHES, FEET, YARDS, MILES).

THE SAME MEASURE.

SIONS OF LIQUID MEASURES (TABLESPOONS, OUNCES, CUPS, PINTS, QUARTS, GALLONS).

ND HAND.

FOR DECADE, CENTURY, NUMBER OF DAYS IN A LEAP YEAR.

VING ADDITION AND SUBTRACTION OF TWO OR THREE TIME UNITS, ONE OR TWO

NVERTING DAYS TO WEEKS, HOURS TO DAYS, MINUTES TO HOURS, SECONDS TO MINUTES.

US, TRAIN, PLANE SCHEDULES.

TIME UNITS (SECONDS, MILLENIUM).

0004215	MEASUREMENT (VOLUME)		
0004215001	USES ARIBITRARY STANOARO (ENGLISH) UNITS TO MEASURE	VOLUME.	SH)
0004215002	USES ARBITRARY STANOARO METRIC UNITS TO MFASURE VOLUME.		UNIT
0004220	MULTIPLICATION		
0004220001	SOLVE MULTIPLICATION PROBLEMS BY USING REPEATED	AOOITION.	Y US
0004220002	RECOGNIZE GROUPS OF EQUIVALENT SETS IN OPERATIONS	INVOLVING MUL	SETS
0004220003	RECALL THE MULTIPLICATION FACTS THROUGH 10 X 10.		THR
0004220004	GIVEN MULTIPLICATION EQUATIONS, STUOENTS CAN SELECT	NUMBERS THAT	STU
0004220005	MULTIPLY A 2 DIGIT NUMBER BY A 2 OIGIT MULTIPLE OF 10.		2 .OI
0004220006	MULTIPLY A NUMBER BY MULTIPLES OF 100.		OF .1
0004220007	MULTIPLY 1, 2, AND 3 DIGIT NUMBERS BY 1000.		ERS
0004220008	USE THE MULTIPLICATION ALGORITHM WITH TWO-PLACE	MULTIPLIERS.	M WI
0004220009	MULTIPLY ANY 3 DIGIT NUMBER AND A 2 DIGIT NUMBER.		A 2
0004220010	FIND SOLUTIONS FOR SENTENCES LIKE 723 X * = * X 723 TO MULTIPLICATION.	GENERALIZE TH	KE 72
0004220011	GENERALIZE THE DISTRIBUTIVE PROPERTY OF MULTIPLICATION	OVER AODITION	PERTY

SH) UNITS TO MEASURE	VOLUME.
UNITS TO MEASURE VOLUME.	
Y USING REPEATED	ADDITION.
SETS IN OPERATIONS	INVOLVING MULTIPLICATION.
THROUGH 10 X 10.	
STUDENTS CAN SELECT	NUMBERS THAT ARE FACTORS.
2 DIGIT MULTIPLE OF 10.	
OF 100.	
ERS BY 1000.	
M WITH TWO-PLACE	MULTIPLIERS.
A 2 DIGIT NUMBER.	
KE 723 X * = * X 723 TO	GENERALIZE THE IDEA OF THE COMMUTATIVE PROPERTIES OF
PERTY OF MULTIPLICATION	OVER ADDITION.

0004225 NUMBER SENTENCES

0004225001 USE SENTENCES LIKE 36 + 4 = X AND X X 3 = 12 TO REPRESENT SENTENCES.

0004225002 FIND SOLUTIONS FOR SENTENCES LIKE * X Y = 36.

0004225003 FIND SOLUTIONS FOR MATHEMATICAL SENTENCES INVOLVING MORE THAN ONE * * = 10.

0004225004 MAKE UP PROBLEM SITUATIONS TO FIT MATHEMATICAL SENTENCES INVOLVING A STORY TO FIT THE SENTENCE: (3 X 4) ÷ 2 = *.

0004225005 RECOGNIZE THAT 3 X * = 7 HAS NO WHOLE NUMRER SOLUTION.

0004225006 USES GREATER THAN, LESS THAN, = TO DISTINGUISH BETWEEN NUMERALS

0004230 NUMBER SYSTEMS (EARLY)

0004230001 RECOGNIZE ROMAN NUMERALS 1 THROUGH XXX1X.

0004230002 USE ROMAN NUMERALS THROUGH XXV.

0004230003 STUDENT WILL WRITE ROMAN NUMERALS TO 100.

0004240 NUMBERS (PRIME - COMPOSITE)

0004240001 DETERMINES WHETHER A NUMBER IS PRIME OR COMPOSITE.

0004240002 FINDS COMMON FACTORS AND GREATEST COMMON FACTOR OF NUMERALS.

X AND X + 3 = 12 TO REPRESENT PHYSICAL SITUATIONS AND FIND SOLUTIONS FOR THI

S , IKE + X Y = 3A.

ICAL SENTENCES INVOLVING MORE THAN ONE OPERATION SUCH AS (2 X 5) + 4 = * AND (3 X 2)

TH FIT MATHEMATICAL SENTENCES INVOLVING MORE THAN ONE OPERATION: FOR EXAMPLE, MAKE UP
(3 X = + 2 =),

S NO WHOLE NUMBER SOLUTION.

AN, = TO DISTINGUISH BETWEEN NUMERALS THROUGH MILLIONS.

THROUGH XXXIX.

XXV.

MERALS TO 100.

IS PRIME OR COMPOSITE.

EATEST COMMON FACTOR OF NUMERALS.

0004245	NUMBERS (RATIONAL AND IRRATIONAL)	
0004245001	STUDENT IDENTIFIES AND ILLUSTRATES THE PROPERTIES OF	RATIONAL NUMBE
0004245002	SOLVE MULTIPLICAT ON PROBLEMS INVOLVING ODD AND EVEN	NUMBERS.
0004245003	SOLVE DIVISION PROBLEMS INVOLVING ODD AND EVEN NUMBERS.	
0004250	NUMBERS (WHOLE)	
0004250001	DEMONSTRATE THAT THE WAY IN WHICH YOU GROUP WHOLE ANSWER.	NUMBERS IN AN
0004250002	DEMONSTRATE THAT THE ORDER IN WHICH YOU ADD TWO WHOLE	NUMBERS DOES N
0004250003	DEMONSTRATE THAT SUBTRACTION UNDOES ADDITION FOR WHOLE	NUMBERS.
0004250004	DEMONSTRATE THAT THE ORDER IN WHICH YOU MULTIPLY TWO	WHOLE NUMBERS
0004250005	DEMONSTRATE THE WAY YOU GROUP NUMBERS IN A	MULTIPLICATION
0004250006	DEMONSTRATE THAT DIVISION UNDOES MULTIPLICATION FOR	WHOLE NUMBERS.
0004255	NUMERALS	
0004255001	COUNTS THROUGH MILLIONS.	
0004255002	READS THROUGH MILLIONS.	
0004255003	WRITES THROUGH MILLIONS.	

ES THE PROPERTIES OF	RATIONAL NUMBERS UNDER ADDITION AND ITS INVERSE.
VOLVING ODD AND EVEN	NUMBERS.
G ODD AND EVEN NUMBERS.	
H YOU GROUP WHOLE	NUMBERS IN AN ADDITION PROBLEM DOES NOT CHANGE THE
ICH YOU ADD TWO WHOLE	NUMBERS DOES NOT CHANGE THE ANSWER.
OES ADDITION FOR WHOLE	NUMBERS.
ICH YOU MULTIPLY TWO	WHOLE NUMBERS DOES NOT CHANGE THE ANSWER.
MBERS IN A	MULTIPLICATION PROBLEM DOES NOT CHANGE THE ANSWER.
MULTIPLICATION FOR	WHOLE NUMBERS.

0004255004 READ NUMERALS AS NEEDED.

0004255005 WRITE NUMERALS AS NEEDED.

0004270 PLACE VALUE

0004270001 RECOGNIZE THE PLACE VALUE CONCEPTS AS THEY RELATE TO INEQUALITI NCEP

0004270002 NAMES ONE THOUSAND AS 100 TENS; ONE MILLION AS 1000 THOUSANDS. NS;

0004270003 ADDS ONE MORE TO THOUSANDS AND MILLIONS DIGITS. ND M

0004270004 IDENTIFIES PLACE VALUE DIGITS THROUGH MILLIONS. S TH

0004270005 WRITES SEVEN DIGIT NUMBERS IN EXPANDED NOTATION, WORDS, NUMERALS. N EX

0004270006 INTERPRET PLACE VALUE FOR LARGE NUMBERS. RGE

0004285 RATIO

0004285001 MAKE UP SETS OF EQUIVALENT RATIOS FOR GIVEN PHYSICAL SITUATIONS. ATIO

0004285002 DETERMINE IF TWO RATIOS ARE EQUIVALENT BY USING THE PROPERTY OF FQUI
MULTIPLICATION. FOR EXAMPLE, 3/4 = 9/12 BECAUSE 3 X 12 = 4 X 9, WH , 3/

0004285003 FIND THE MISSING WHOLE NUMBER IN TWO EQUIVALENT RATIOS LIKE 2/3 = R IN

0004285004 USE EQUIVALENT RATIOS TO CONVERT UNITS OF MEASURE TO FIND HOW MA VERT

NCEPTS AS THEY RELATE TO	INEQUALITIES.
NS; ONE MILLION AS 1000	THOUSANDS.
ND MILLIONS DIGITS.	
S THROUGH MILLIONS.	
N EXPANDED NOTATION, WORDS,	NUMERALS.
RGE NUMBERS.	
ATIOS FOR GIVEN PHYSICAL	SITUATIONS, SUCH AS 1/2, 2/4, 3/6, 4/8, . . .
EQUIVALENT BY USING THE , 3/4 = 9/12 BECAUSE 3 X 12	PROPERTY OF PROPORTIONS COMMONLY CALLED CROSS = 4 X 9, WHEREAS 6/7 = 7/8 BECAUSE 6 X 8 = 7 X 7.
R IN TWO EQUIVALENT RATIOS	LIKE 2/3 = X/9 OR 5/X = 25/70.
VE ITS OF MEASURE TO	FIND HOW MANY PINTS THERE ARE IN 3 GALLONS.

0004295	SETS	
0004295001	GIVEN A SET, THE STUDENT WILL DESCRIBE AN APPROPRIATE	UNIVERSE.
0004295002	GIVEN A UNIVERSAL SET AND AN OPEN SENTENCE, THE STUDENT	WILL DESCRIBE
0004295003	GIVEN SETS, THE STUDENT WILL IDENTIFY THEM AS FINITE OR	INFINITE.
0004315	SUBTRACTION	
0004315003	SUBTRACT USING THREE-PLACE NUMERALS AND FOUR-PLACE	NUMERALS.
0004325	VALUE OF COINS	
0004325001	STUDENTS CAN ACCURATELY APPLY MONEY NOTATION TO	ADDITION.
0004325002	APPLY MONEY NOTATION TO SUBTRACTION.	

WILL DESCRIBE AN APPROPRIATE UNIVERSE.

AN OPEN SENTENCE, THE STUDENT WILL DESCRIBE THE SOLUTION SET.

ILL IDENTIFY THEM AS FINITE OR INFINITE.

E NUMERALS AND FOUR-PLACE NUMERALS.

PPLY MONEY NOTATION TO ADDITION.

UBTRACTION.

0005005	ADDITION	
0005005001	STUDENT REGROUPS TO SOLVE MULTI-DIGIT ADDITION PROBLEMS.	SOL
0005005002	FIND THE SUM OF 4 ADDENDS WITH UP TO 4 DIGITS EACH.	DEN
0005005003	SOLVES ANY GIVEN ADDITION EQUATION INVOLVING WHOLE NUMBERS U	ITI
0005005004	WRITE AN EQUATION FOR A WORD PROBLEM INVOLVING ADDITION AND FIND	R A
0005015	BASES	
0005015001	GIVES BASE 4 NUMERAL FOR A GIVEN SET.	FO
0005015002	GIVES FACE VALUE OF BASE 4 DIGITS.	BASE
0005015003	IDENTIFIES BASE 4 DIGITS.	GITS
0005015004	GIVES PLACE VALUE, BASE 4 DIGITS.	ASE
0005015005	GIVES TOTAL VALUE OF BASE 4 DIGITS.	BAS
0005015006	CONVERTS BASE 10 NUMERAL TO BASE 4.	ERAL
0005015007	CONVERTS BASE 4 NUMERAL TO BASE 10.	RAL
0005025	DECIMALS	
0005025001	RECOGNIZES DECIMALS AS NAMES FOR RATIONAL NUMBERS.	AS N

SOLVE MULTI-DIGIT ADDITION PROBLEMS.

DENDS WITH UP TO 4 DIGITS EACH.

ITION EQUATION INVOLVING WHOLE NUMBERS USING THE ADDITION ALGORITHM.

R A WORD PROBLEM INVOLVING ADDITION AND FIND THE ANSWER.

FOR A GIVEN SET.

BASE 4 DIGITS.

GITS.

ASE 4 DIGITS.

BASE 4 DIGITS.

ERAL TO BASE 4.

RAL TO BASE 10.

AS NAMES FOR RATIONAL NUMBERS.

0005025002 READ SIMPLE DECIMALS.

0005025003 WRITE SIMPLE DECIMALS.

0005025004 READS RATIONAL NUMBERS USING DECIMAL NOTATION FOR TENTHS, HUNDR IMAL

0005025005 EXPRESS FRACTIONS WITH DENOMINATORS OF 10, 100, 1000 AS DECIMALS. ORS

0005025006 EXPRESS DECIMALS GIVEN IN TENTHS, HUNDREDTHS, OR THOUSANDTHS AS , HU

0005025007 WRITES RATIONAL NUMBERS USING DECIMAL NOTATION FOR TENTHS, HUNDR CIMA

0005025008 WRITES COLUMN ADDITION EQUATIONS USING DECIMAL NOTATION. USI

0005025009 SOLVES COLUMN ADDITION EQUATIONS USING DECIMAL NOTATION. USI

0005025010 FIND THE SUM OF FIVE OR FEWER DECIMALS. CIMA

0005025011 FIND THE DIFFERENCE OF TWO DECIMALS. ALS.

0005025012 USES LESS THAN, GREATER THAN, = TO DISTINGUISH INEQUALITIES TO

0005025013 SOLVE WORD PROBLEMS INVOLVING ADDITION AND/OR SUBTRACTION O DITI

0005025014 RECOGNIZE THE PLACE VALUE OF EACH DIGIT IN A DECIMAL THROUGH THOUS H DI

0005025015 EXPRESS MEASUREMENTS IN DECIMAL NOTATION. NOTA

IMAL NOTATION FOR	TENTHS, HUNDREDTHS, AND THOUSANDTHS.
ORS OF 10, 100, 1000 AS	DECIMALS.
, HUNDREDTHS, OR	THOUSANDTHS AS FRACTIONS.
CIMAL NOTATION FOR	TENTHS, HUNDREDTHS, AND THOUSANDTHS.
USING DECIMAL NOTATION.	
USING DECIMAL NOTATION.	
CIMALS.	
ALS.	
TO DISTINGUISH	INEQUALITIES USING DECIMAL NOTATION.
DITION AND/OR	SUBTRACTION OF DECIMALS.
H DIGIT IN A DECIMAL	THROUGH THOUSANDS.
NOTATION.	

0005030	DIVISION	
0005030001	IDENTIFY THE DIVISOR, DIVIDEND, QUOTIENT, AND REMAINDER	IN A DIVI
0005030002	DIVIDE A 1,2,3,4, DIGIT NUMBER BY A 1 DIGIT NUMBER.	
0005030003	GIVEN A 2 DIGIT DIVISOR, EXPRESS IT TO THE NEARER	MULTIPLE
0005030004	USES DIVISION ALGORITHM TO SOLVE EQUATIONS INVOLVING WITHOUT REMAINDERS.	TWO-DIGIT
0005030005	GIVEN A WORD PROBLEM REQUIRING THE OPERATION OF	DIVISION,
0005030006	GIVEN A TWO-STEP WORD PROBLEM INVOLVING WHOLE NUMBERS,	WRITE THE
0005030007	DEMONSTRATE AN UNDERSTANDING OF THE FUNCTION OF 0 IN	DIVISION,
0005030008	DEMONSTRATE AN UNDERSTANDING OF THE DIVISION PROCESS	THROUGH T
0005035	ESTIMATION	
0005035001	ESTIMATE DISTANCES TO THE NEAREST UNIT.	
0005035002	GIVEN A NUMBER TO MILLIONS, EXPRESS IT TO THE NEAREST	10, 100,
0005035003	ESTIMATE THE ANSWER TO AN ADDITION OR SUBTRACTION MINUEND TO THE NEAREST TEN, 100, 1000.	PROBLEM B
0005035004	ROUNDS NUMBERS TO MILLIONS IN ESTIMATING SUMS.	
0005035005	STUDENT ROUNDS NUMBERS TO MILLIONS IN ESTIMATING	DIFFERENC

DEND, QUOTIENT, AND REMAINDER IN A DIVISION PROBLEM.

MBER BY A 1 DIGIT NUMBER.

XPRESS IT TO THE NEARER MULTIPLE OF 10 AND ESTIMATE THE QUOTIENT.

SOLVE EQUATIONS INVOLVING TWO-DIGIT DIVISORS AND MULTI-DIGITED QUOTIENTS WITH AND

RING THE OPERATION OF DIVISION, WRITE THE EQUATION AND FIND THE SOLUTION.

LEM INVOLVING WHOLE NUMBERS, WRITE THE EQUATION AND FIND THE SOLUTION.

G OF THE FUNCTION OF 0 IN DIVISION.

G OF THE DIVISION PROCESS THROUGH THE USE OF EXPANDED NOTATION.

NEAREST UNIT.

EXPRESS IT TO THE NEAREST 10, 100, 1000.

DDITION OR SUBTRACTION PROBLEM BY ROUNDING THE ADDENDS OR SUBTRAHEND AND
100, 1000.

IN ESTIMATING SUMS.

ILLIONS IN ESTIMATING DIFFERENCES.

0005040	EXPONENTIAL NOTATION
0005040001	USE SIMPLE EXPONENTS.
0005045	FRACTIONS
0005045001	IDENTIFIES FRACTIONS RELATED TO SETS.
0005045002	IDENTIFIES FRACTIONS RELATED TO PARTS OF REGIONS.
0005045003	IDENTIFIES FRACTIONS RELATED TO ORDERED PAIRS.
0005045004	WRITE SENTENCES USING FRACTIONS TO REPRESENT PHYSICAL SITUATIONS.
0005045005	RECOGNIZE THE NUMERATOR AND THE DENOMINATOR IN A GIVEN FRACTION.
0005045006	FIND THE SUM OF TWO OR MORE PROPER FRACTIONS WITH LIKE DENOMINATORS.
0005045007	FIND THE DIFFERENCE OF TWO PROPER FRACTIONS WITH LIKE DENOMINATORS.
0005045008	BUILDS SETS OF EQUIVALENT FRACTIONS (MULTIPLIES BOTH NUMERATOR AND SAME NUMBER, INCREASING THE NUMBER BY ONE EACH TIME).
0005045009	FINDS GREATEST COMMON FACTOR FOR A SET OF NUMBERS.
0005045010	USES GREATEST COMMON FACTOR FOR A SET OF NUMBERS TO REDUCE FRACTIO
0005045011	FINDS THE LOWEST TERMS FRACTION WHEN GIVEN A SET OF EQUIVALENT FRA
0005045012	GIVEN A FRACTION RECOGNIZE WHETHER IT IS IN LOWEST TERMS. IF NOT

SETS.

PARTS OF REGIONS.

ORDERED PAIRS.

TO REPRESENT PHYSICAL SITUATIONS.

DENOMINATOR IN A GIVEN FRACTION.

ER FRACTIONS WITH LIKE DENOMINATORS.

R FRACTIONS WITH LIKE DENOMINATORS.

IONS MULTIPLIES BOTH NUMERATOR AND DENOMINATOR OF A GIVEN FRACTION BY THE BER BY ONE EACH TIME).

R A SET OF NUMBERS.

A SET OF NUMBERS TO REDUCE FRACTIONS TO LOWEST TERMS.

WHEN GIVEN A SET OF EQUIVALENT FRACTIONS.

HER IT IS IN LOWEST TERMS. IF NOT, EXPRESS THE FRACTION IN LOWEST TERMS.

0005045013	SOLVES ADDITION EQUATIONS INVOLVING LIKE AND UNLIKE	FRACTIONS.
0005045014	RECOGNIZE THAT ZERO IS THE IDENTITY ELEMENT FOR WELL AS IN THE SET OF WHOLE NUMBERS.	ADDITION I
0005045015	GIVEN A PICTURE OR DIAGRAM WHICH IS SHADED TO SHOW A SHADING.	MIXED NUMB
0005045016	IDENTIFIES AN IMPROPER FRACTION.	
0005045017	GIVEN AN IMPROPER FRACTION, EXPRESS IT AS A MIXED	NUMBER, TH
0005045018	GIVEN AN IMPROPER FRACTION, EXPRESS IT AS A MIXED IMPROPER FRACTION.	NUMBER, OR
0005045019	FIND THE SUM OF A WHOLE NUMBER AND A FRACTION, OR A	WHOLE NUMB
0005045020	FIND THE SUM OF TWO OR THREE MIXED NUMBERS WITH LIKE	DENOMINATO
0005045021	SOLVES ADDITION EQUATIONS INVOLVING MIXED NUMBERS.	
0005045022	SUBTRACT A FRACTION OR A MIXED NUMBER FROM A WHOLE	NUMBER AND
0005045023	SOLVES SUBTRACTION EQUATIONS INVOLVING MIXED NUMBERS.	
0005045024	FIND THE DIFFERENCE OF TWO MIXED NUMBERS WITH LIKE	DENOMINATO
0005045025	GIVEN A ONE-STEP WORD PROBLEM REQUIRING ADDITION OF LOWEST TERMS.	FRACTIONS,
0005045026	GIVEN A ONE STEP WORD PROBLEM REQUIRING SUBTRACTION OF LOWEST TERMS.	FRACTIONS,

NVOLVING LIKE AND UNLIKE	FRACTIONS.
DENTITY ELEMENT FOR NUMBERS.	ADDITION IN THE SET OF POSITIVE RATIONAL NUMBERS AS
WHICH IS SHADED TO SHOW A	MIXED NUMBER, RECOGNIZE THE MIXED NUMBER SHOWN BY THE
TION.	
EXPRESS IT AS A MIXED	NUMBER, THE FRACTIONAL PART OF WHICH IS IN LOWEST TENS.
EXPRESS IT AS A MIXED	NUMBER, OR GIVEN A MIXED NUMBER, EXPRESS IT AS AN
BER AND A FRACTION, OR A	WHOLE NUMBER AND A MIXED NUMBER.
MIXED NUMBERS WITH LIKE	DENOMINATORS AND EXPRESS THE ANSWER IN LOWEST TERMS.
NVOLVING MIXED NUMBERS.	
KED NUMBER FROM A WHOLE	NUMBER AND WRITE THE ANSWER IN LOWEST TERMS.
S INVOLVING MIXED NUMBERS.	
IXED NUMBERS WITH LIKE	DENOMINATORS AND WRITE THE ANSWER IN LOWEST TERMS.
M REQUIRING ADDITION OF	FRACTIONS, WRITE THE EQUATION AND FIND THE ANSWER IN
M REQUIRING SUBTRACTION OF	FRACTIONS, WRITE THE EQUATION AND EXPRESS THE ANSWER IN

0005045027 GIVEN A TWO STEP WORD PROBLEM INVOLVING ADDITION AND/OR SUBTRACTION O[illegible]VOL
THE ANSWER IN LOWEST TERMS.

0005050 GEOMETRY (COORDINATE SYSTEMS)

0005050001 GRAPHS SETS OF POINTS ON A NUMBER LINE. WHOLE NUMBERS AND RATIONAL [illegible]ER LI

0005050002 GRAPHS NEGATIVE INTEGERS ON A NUMBER LINE. [illegible]UMBER

0005050003 GRAPHS NEGATIVE INTEGERS ON A COORDINATE AXIS. [illegible]ORDI

0005055 GEOMETRY (PLANE FIGURES) - ANGLES - [illegible]S -

0005055001 MEASURES ANGLES. USES UNIT ANGLE, COMPASS AND PROTRACTOR. [illegible]E, C

0005055002 RECOGNIZE THAT A RIGHT ANGLE HAS THE MEASURE 90 DEGREES. [illegible]S THE

0005055003 RECOGNIZE ACUTE, RIGHT, AND OBTUSE ANGLES. [illegible]USE A

0005060 GEOMETRY (PLANE FIGURES) - CIRCLE - [illegible]LE -

0005060001 RECOGNIZE THE RADIUS AND DIAMETER OF A CIRCLE. [illegible]ER OF

0005060002 FINDS PERIMETER (CIRCUMFERENCE) OF A CIRCLE. [illegible] OF A

VOLVING ADDITION AND/OR SUBTRACTION OF FRACTIONS, WRITE THE EQUATION AND EXPRES

ER LINE. WHOLE NUMBERS AND RATIONAL NUMBERS.

UMBER LINE.

ORDINATE AXIS.

ES -

LE, COMPASS AND PROTRACTOR.

S THE MEASURE 90 DEGREES.

USE ANGLES.

LE -

ER OF A CIRCLE.

OF A CIRCLE.

0005065	GEOMETRY (PLANE FIGURES) - CONGRUENCE -	
0005065001	IDENTIFIES CONGRUENT SEGMENTS.	
0005065002	GIVEN SETS OF ANGLES THE STUDENT WILL MEASURE WITH A	PROTRACTOR
0005065003	RECOGNIZE THAT TRIANGLES ARE CONGRUENT IF CORRESPONDING CONGRUENT.	SIDES ARE
0005070	GEOMETRY (PLANE FIGURES) - CONSTRUCTIONS -	
0005070001	CONSTRUCTS A COPY OF A CIRCLE, SEGMENT.	
0005070002	BISECT AN ANGLE. (STUDENTS MAY DISCOVER SEVERAL	DIFFERENT
0005070003	BISECTS AN ANGLE, SEGMENT.	
0005070004	RECONSTRUCT AN ANGLE AND A TRIANGLE BY USING A COMPASS	AND A STRA
0005080	GEOMETRY (PLANE FIGURES) - LINES -	
0005080001	RECOGNIZE PERPENDICULAR LINES.	
0005080002	IDENTIFIES PERPENDICULAR LINES.	
0005090	GEOMETRY (PLANE FIGURES) - POLYGONS -	
0005090001	GIVEN A DRAWING OR A DESCRIPTION OF ANY POLYGON WITH NO	MORE THAN

CONGRUENCE -

TS.

IDENT WILL MEASURE WITH A PROTRACTOR TO FIND THOSE THAT ARE CONGRUENT.

E CONGRUENT IF CORRESPONDING SIDES ARE CONGRUENT AND CORRESPONDING ANGLES ARE

CONSTRUCTIONS -

LE, SEGMENT.

MAY DISCOVER SEVERAL DIFFERENT CONSTRUCTIONS).

TRIANGLE BY USING A COMPASS AND A STRAIGHTEDGE.

LINES -

ES.

NES.

POLYGONS -

PTION OF ANY POLYGON WITH NO MORE THAN FOUR SIDES, IDENTIFY THE POLYGON.

0005090002 FIND THE PERIMETER OF ANY POLYGON WHEN GIVEN THE MEASURE O EACH OF ITS ON WH

0005090003 FIND THE AREA OF A PLANE REGION, SUCH AS RECTANGLES. SUC

0005095 GEOMETRY (PLANE FIGURES) - QUADRILATERALS - RILAT

0005095001 FINDS AREA, USING STANDARD FORMULA OF RECTANGLES AND PARALLELOGRAMS ULA O

0005095002 USES PARALLEL AND PERPENDICULAR LINES TO CONSTRUCT QUADRILATERAL S LINE

0005110 GEOMETRY (PLANE FIGURES) - SYMBOLS AND NOTATION - CLS A

0005110001 RECOGNIZES STANDARD GEOMETRIC NOTATION FOR POINTS, SEGMENTS, RAYS UTATI

0005110002 USES ANGLE NOTATION (LESS THAN) TO DETERMINE CONGRUENCY FOR ANGLES. TO D

0005115 GEOMETRY (PLANE FIGURES) - SYMMETRY - ETRY

0005115001 RECOGNIZE SYMMETRY WITH RESPECT TO A POINT BY FOLDING A FIGURE (CIRCLE, SQUARE). PAPER ALONG A TO A

0005125 GEOMETRY (PLANE FIGURES) - TRIANGLE - NGLE

0005125001 DEMONSTRATE THAT THE SUM OF THE MEASURES OF THE ANGLES CORNERS OF A TRIANGULAR PIECE OF PAPER. OF A TRIANGLE MEAS F PAP

5125002 FINDS AREA OF TRIANGLE WHEN GIVEN BASE AND HEIGHT. EN BA

ON WHEN GIVEN THE MEASURE OF EACH OF ITS SIDES.

SUCH AS RECTANGLES.

RILATERALS -

ULA OF RECTANGLES AND PARALLELOGRAMS.

LINES TO CONSTRUCT QUADRILATERALS.

CLS AND NOTATION -

UTATION FOR POINTS, SEGMENTS, RAYS, LINES.

TO DETERMINE CONGRUENCY FOR ANGLES.

ETRY -

TO A POINT BY FOLDING A PAPER ALONG A LINE THROUGH A CENTER OF SUCH A GEOMETRIC

NGLE -

MEASURES OF THE ANGLES OF A TRIANGLE IS 180 DEGREES BY TEARING OFF AND MATCHING
F PAPER.

EN AND HEIGHT.

ERIC

0005125003	COMPUTE THE AREA OF A TRIANGLE.
0005130	GEOMETRY (SIZE AND SHAPE)
0005130001	USES NOTATION FOR CONGRUENCY.
0005130002	DEMONSTRATE UNDERSTANDING OF GEOMETRIC NOTATION BY SUCH AS SEGMENTS, LINES, ANGLES, RAYS.
0005130003	DEMONSTRATE UNDERSTANDING OF GEOMETRIC NOTATION AND GEOMETRIC OBJECTS.
0005135	GEOMETRY (SOLIDS)
0005135001	COMPUTE THE SURFACE AREA OF A RECTANGULAR BOX.
0005135002	FINDS SURFACE AREA FOR CUBIC FIGURE.
0005135003	RECOGNIZE INFORMAL CONCEPTS OF VOLUME; FOR EXAMPLE A BOX WITH DIMENS CONTAINS 24 ONE-INCH CUBES.
0005135004	FINDS VOLUME FOR CUBIC FIGURE USING STANDARD FORMULA.
0005135005	RECOGNIZE COMMON POLYHEDRA SUCH AS TETRAHEDRON, A CUBE,
0005135006	IDENTIFY FACES, EDGES, VERTICES, AND DIAGONALS OF
0005135007	DEMONSTRATE AN UNDERSTANDING OF VARIOUS POLYHEDRA BY
0005135008	USE EULER'S FORMULA, NAMELY V + F = E + 2 WHERE V IS THE NUMBER OF V THE NUMBER OF EDGES OF ANY POLYHEDRON.

LF.

GEOMETRIC NOTATION BY USING THE SYMBOLS FOR THE ABSTRACT GEOMETRIC OBJECTS,
FS, RAYS.

GEOMETRIC NOTATION AND CONGRUENCY BY WRITING THE SYMBOLS FOR PAIRS OF CONGRUENT

A RECTANGULAR BOX.

FIGURE.

OF VOLUME; FOR EXAMPLE A BOX WITH DIMENSIONS 2 INCHES BY 3 INCHES BY 4 INCHES

E USING STANDARD FORMULA.

UCH AS TETRAHEDRON, A CUBE, A RECTANGULAR PRISM.

CES, AND DIAGONALS OF COMMON POLYHEDRA.

OF VARIOUS POLYHEDRA BY MAKING APPROPRIATE PAPER MODELS.

V E + 2 WHERE V IS THE NUMBER OF VERTICES, F IS THE NUMBER OF FACES, AND E IS
YHEDRON.

0005140	GEOMETRY (SPACE RELATIONSHIPS)
0005140001	RECOGNIZE THAT A PLANE IS DETERMINED BY THREE POINTS NOT ALL ON ONE LI MINED
0005140002	RECOGNIZE PARALLEL PLANES.
0005145	GRAPHS
0005145001	CONSTRUCT SIMPLE PICTURE GRAPHS.
0005145002	CONSTRUCT SIMPLE LINE GRAPHS.
0005145003	CONSTRUCT SIMPLE BAR GRAPHS.
0005150	INVERSE (ADDITIVE)
0005150001	APPLY THE CONCEPT OF THE INVERSE RELATIONSHIPS OF ADDITION AND S REL
0005155	INVERSE (MULTIPLICATIVE)
0005155001	APPLIES THE CONCEPT OF INVERSE RELATIONSHIP OF MULTIPLICATION RELAT
0005180	MEASUREMENT (LINEAR)
0005180001	EXPRESS LINEAR MEASURES OF INCHES AS FEET, INCHES AS YARDS, FEET AS ES AS
0005180002	FIND THE SUM OF THREE LIKE LINEAR ENGLISH MEASURES EXPRESS ANSWER R EN

MINED BY THREE POINTS NOT ALL ON ONE LINE.

RELATIONSHIPS OF	ADDITION AND SUBTRACTION.
RELATIONSHIP OF	MULTIPLICATION AND DIVISION.
ES AS FEET, INCHES AS	YARDS, FEET AS YARDS AND FEET AS MILES, AND VICE VERSA.
AR ENGLISH MEASURES	EXPRESS ANSWER IN SIMPLEST FORM.

ERIC

0005180003	GIVEN A RULER WITH 16 DIVISIONS TO THE INCH, MEASURE A GIVEN LIN
0005180004	USING A TABLE OF METRIC MEASURES, EXPRESS LINEAR MEASURES DECIMETERS, DECIMETERS AS METERS, CENTIMETERS AS METERS, AND METER
0005180005	RECOGNIZE THE SIMILARITY OF MAPS MADE WITH DIFFERENT SCALES.
0005185	MEASUREMENT (LIQUID)
0005185001	USING A TABLE OF LIQUID MEASURES, EXPRESS CUPS AS PINTS, CUPS AS Q FLUID OUNCES AS CUPS, AND FLUID OUNCES AS PINTS, AND VICE VERS
0005185002	ADD OR SUBTRACT LIQUID MEASURES, EXPRESSING ANSWERS IN SIMPLEST
0005195	MEASUREMENT (RATE)
0005195001	DEMONSTRATE UNDERSTANDING OF RATE CONCEPT, BY APPLYING EQUATIONS
0005200	MEASUREMENT (RELATIVE)
0005200001	RECOGNIZE THAT ALL MEASUREMENT INVOLVES APPROXIMATION.
0005210	MEASUREMENT (TIME)
0005210001	ADD OR SUBTRACT MEASURES OF TIME (CENTURIES, YEARS, MINUTES,
0005210002	ADDS UNITS OF TIME EXTENDING.

...LS TO THE INCH, MEASURE A	GIVEN LINE SEGMENT TO THE NEAREST EIGHTH OF AN INCH.
...URES, EXPRESS LINEAR ...TERS, CENTIMETERS AS METERS,	MEASURES OF MILLIMETERS AS CENTIMETERS, CENTIMETERS AS AND METERS AS KILOMETERS, AND VICE VERSA.
MAPS MADE WITH DIFFERENT	SCALES.
...URES, EXPRESS CUPS AS PINTS, ...ID OUNCES AS PINTS, AND	CUPS AS QUARTS, QUARTS AS GALLONS, PINTS AS QUARTS, VICE VERSA.
...RES, EXPRESSING ANSWERS IN	SIMPLEST FORM.
RATE CONCEPT, BY APPLYING	EQUATIONS IN WRITTEN EXERCISES.
...NT INVOLVES APPROXIMATION.	
...TIME (CENTURIES, YEARS,	MINUTES, ETC,) EXPRESSING ANSWERS IN SIMPLEST FORM.

0005210003	SUBTRACTS UNITS OF TIME EXTENDING.	NG.
0005210004	DEMONSTRATE UNDERSTANDING OF TIME CONCEPT BY APPLYING	EQUATIONS IN W ME C
0005215	MEASUREMENT (VOLUME)	
0005215001	RELATES LIQUID MEASURE TO CUBIC MEASURE.	MEAS
0005220	MULTIPLICATION	
0005220001	IDENTIFY THE FACTORS AND THE PRODUCT IN A MULTIPLICATION PROBLEM.	DUCT
0005220002	FIND THE MISSING FACTOR IN A MULTIPLICATION PROBLEM.	TIPL
0005220003	DEMONSTRATE A WORKING KNOWLEDGE OF THE BASIC FACTS.	OPERATIONS AND OF
0005220004	FIND THE PRODUCT OF A 1-DIGIT NUMBER AND A 2,3,4, DIGIT	NUMBER. UMBER
0005220005	FIND THE PRODUCT OF A 1-DIGIT NUMBER AND A MULTIPLE OF	10 OR 100. UMBER
0005220006	FIND THE PRODUCT OF TWO 2-DIGIT NUMBERS WHEN BOTH	FACTORS ARE MU NUMB
0005220007	FIND THE PRODUCT OF TWO 2-DIGIT NUMBERS.	NUMB
0005220008	FIND THE PRODUCT OF A 2-DIGIT NUMBER AND A 3,4, DIGIT	NUMBER. MBER
0005220009	GIVEN A ONE-STEP WORD PROBLEM REQUIRING THE OPERATION ANSWER (ONE DIGIT MULTIPLIER).	OF MULTIPLICAT QUIR

NG.

ME CONCEPT BY APPLYING EQUATIONS IN WRITTEN EXERCISES.

MEASURE.

DUCT IN A MULTIPLICATION PROBLEM.

TIPLICATION PROBLEM.

UF THE BASIC FACTS. OPERATIONS AND FUNCTIONS OF MULTIPLICATION.

UMBER AND A 2,3,4, DIGIT NUMBER.

UMBER AND A MULTIPLE OF 10 OR 100.

NUMBERS WHEN BOTH FACTORS ARE MULTIPLES OF 10.

NUMBERS.

MBER AND A 3,4, DIGIT NUMBER.

QUIRING THE OPERATION OF MULTIPLICATION, WRITE THE EQUATION AND FIND THE

0005220010	GIVEN A TWO STEP WORD PROBLEM REQUIRING MULTIPLICATION AND ADDIT THE ANSWER.	LEM
0005220011	GIVEN A WORD PROBLEM REQUIRING MULTIPLICATION, WRITE THE EQUATION	RING
0005220012	SOLVE MULTIPLICATION PROBLEMS USING THE DISTRIBUTIVE PROPERTY	EMS
0005230	NUMBER SYSTEMS (EARLY)	
0005230001	RECOGNIZES OTHER NUMBER SYSTEMS - GREEK, EGYPTIAN, EAST ARABIC.	STEM
0005230002	READ ROMAN NUMERALS.	
0005230003	WRITE ROMAN NUMERALS.	
0005230004	STUDENT WILL READ DATES IN ROMAN NUMERALS.	ROM
0005230005	GIVES ROMAN NUMERAL FOR A BASE 10 NUMERAL.	BASE
0005235	NUMBERS (INTEGERS)	
0005235001	USE THE NUMBER LINE TO REPRESENT POSITIVE RATIONAL INTEGERS.	RESE
0005235002	USE THE NUMBER LINE TO REPRESENT NEGATIVE INTEGERS.	RESE
0005235003	RECOGNIZES NEGATIVE INTEGERS.	RS.
0005235004	EXPRESS THE QUOTIENT OF INTEGERS AS A MIXED NUMBER; FOR EXAMPLE,	TEGE

LEM REQUIRING MULTIPLICATION AND ADDITION OR SUBTRACTION, WRITE THE EQUATION AND FIND

RING MULTIPLICATION, WRITE THE EQUATION AND FIND THE ANSWER.

EMS USING THE DISTRIBUTIVE PROPERTY OF MULTIPLICATION OVER ADDITION.

STEMS - GREEK, EGYPTIAN, EAST ARABIC.

ROMAN NUMERALS.

BASE 10 NUMERAL.

PRESENT POSITIVE RATIONAL INTEGERS.

PRESENT NEGATIVE INTEGERS.

RS.

TEGERS AS A MIXED NUMBER; FOR EXAMPLE, 24 DIVIDED BY 5 = 4 4/5.

0005240 NUMBERS (PRIME - COMPOSITE)

0005240001 IDENTIFY COMPOSITE NUMBERS.

0005240002 GIVES COMPLETE FACTORIZATION OF A COMPOSITE NUMBER.

0005240003 USES INTERSECTION TO FIND COMMON MULTIPLES OF NUMBERS.

0005240004 STUDENT NAMES COMMON FACTORS OF NUMBERS.

0005240005 DETERMINES LEAST COMMON MULTIPLE OF NUMBERS.

0005240006 IDENTIFY PRIME NUMBERS SUCH AS 2, 3, 5, 7, 11, 13, 17.

0005240007 STUDENT DESIGNATES THE PRIME FACTORS OF NUMBERS.

0005240008 FIND THE PRIME FACTORS OF NUMBERS THROUGH 100.

0005240009 GIVEN ANY TWO WHOLE NUMBERS, FIND THEIR GREATEST COMMON FACTOR.

0005240010 GIVEN ANY WHOLE NUMBER, RECOGNIZE WHETHER IT IS PRIME OR COMPOSITE.

0005245 NUMBERS (RATIONAL AND IRRATIONAL)

0005245001 RECOGNIZES THAT EACH SET OF EQUIVALENT FRACTIONS IS ASSOCIATED WIT

0005245002 WRITE MANY NAMES FOR THE SAME RATIONAL NUMBER.

0005245003 FIND MANY WAYS TO EXPRESS A RATIONAL NUMBER.

F A COMPOSITE NUMBER.

ON MULTIPLES OF NUMBERS.

F NUMBERS.

LE OF NUMBERS.

2, 3, 5, 7, 11, 13, 17.

ACTORS OF NUMBERS.

ERS THROUGH 100.

IND THEIR GREATEST COMMON FACTOR.

IZE WHETHER IT IS PRIME OR COMPOSITE.

AL;

UIVALENT FRACTIONS IS ASSOCIATED WITH ONE RATIONAL NUMBER.

RATIONAL NUMBER.

TIONAL NUMBER.

0005245004 DETERMINES INEQUALITITES FOR RATIONAL NUMBERS.

0005245005 ADD SIMPLE RATIONAL NUMBERS BY USE OF PHYSICAL OBJECTS, DIAGRAMS,

0005245006 ADD RATIONAL NUMBERS.

0005245007 DEMONSTRATE KNOWLEDGE THAT A WHOLE NUMBER IS ALSO A MIXED NUMB

0005245008 USE DIFFERENT TECHNIQUES FOR FINDING THE SUM OF TWO RATIONAL N

0005245009 USE THE COMMUTATIVE PROPERTIES FOR ADDITION IN ~~THE SET~~ OF POSITIV

0005245010 USE THE ASSOCIATIVE PROPERTY FOR ADDITION IN THE SET OF POSITIVE R

0005245011 DETERMINE GREATER THAN, LESS THAN, AND BETWEENNESS FOR RATIONAL N

0005245012 IDENTIFY THE LARGER RATIONAL NUMBER OF TWO BEING COMPARED.

0005245013 RECOGNIZE THE SET OF POSITIVE RATIONAL NUMBERS (FRACTIONS

0005245015 RECOGNIZE THAT THERE IS NO SMALLEST POSITIVE RATIONAL NUMBER.

0005245016 SUBTRACT SIMPLE RATIONAL NUMBERS BY USE OF PHYSICAL OBJECTS, D

0005245017 SUBTRACT RATIONAL NUMBERS.

0005245018 RECOGNIZE THAT SUBRRACTION IS NOT ALWAYS POSSIBLE IN THE SET OF POS

R RATIONAL NUMBERS.

BY USE OF PHYSICAL OBJECTS, DIAGRAMS, ETC.

1B A WHOLE NUMBER IS ALSO A MIXED NUMBER.

N R FINDING THE SUM OF TWO RATIONAL NUMBERS.

V IES FOR ADDITION IN THE SET OF POSITIVE RATIONAL NUMBERS.

R Y FOR ADDITION IN THE SET OF POSITIVE RATIONAL NUMBERS.

N S THAN, AND BETWEENNESS FOR RATIONAL NUMBERS.

_ NUMBER OF TWO BEING COMPARED.

S VE RATIONAL NUMBERS (FRACTIONS) AS AN EXTENSION OF THE SET OF WHOLE NUMBERS.

SMALLEST POSITIVE RATIONAL NUMBER.

D MBERS BY USE OF PHYSICAL OBJECTS, DIAGRAMS, ETC.

S IS NOT ALWAYS POSSIBLE IN THE SET OF POSITIVE RATIONAL NUMBERS.

0005245019	MULTIPLY SIMPLE RATIONAL NUMBERS BY USE OF PHYSICAL	OBJECTS, DIAG S BY
0005245020	IDENTIFY PROPERTIES OF RATIONAL NUMBERS UNDER	MULTIPLICATIO NUME
0005245021	STUDENT WILL ILLUSTRATE PROPERTIES OF RATIONAL NUMBERS	UNDER MULTIPL IES (
0005245022	ILLUSTRATE PROPERTIES OF RATIONAL NUMBERS UNDER	DIVISION. AL NU
0005250	NUMBERS (WHOLE)	
0005250001	RECOGNIZE THAT SUBTRACTION IS NOT ALWAYS POSSIBLE IN THE SET OF WHOLE	T AL
0005255	NUMERALS	
0005255001	COUNTS BEYOND BILLIONS.	
0005255002	READS BEYOND BILLIONS.	
0005255003	WRITES BEYOND BILLIONS.	
0005270	PLACE VALUE	
0005270001	IDENTIFIES LARGER OR SMALLER NUMBER IN A GIVEN AND EXPANDED NOTATION.	COMPARISON OF BER
0005270002	RECOGNIZE THE PLACE VALUE OF EACH DIGIT OF A NUMBER TO	THE MILLIONS H CI

S BY USE OF PHYSICAL	OBJECTS, DIAGRAMS, ETC.
NUMBERS UNDER	MULTIPLICATION.
IES OF RATIONAL NUMBERS	UNDER MULTIPLICATION.
AL NUMBERS UNDER	DIVISION.

OT ALWAYS POSSIBLE IN THE SET OF WHOLE NUMBERS.

BER IN A GIVEN	COMPARISON OF NUMBERS BY USING KNOWLEDGE OF PLACE VALUE
H DIGIT OF A NUMBER TO	THE MILLIONS PLACE.

0005270003	WRITE A GIVEN NUMERAL TO MILLIONS IN EXPANDED FORM AND	GIVEN A N LION
0005270004	GIVEN A NUMERAL TO HUNDRED MILLIONS, EXPRESS IT ORALLY NUMBER TO HUNDRED MILLIONS, EXPRESS IT ORALLY AND WRITE	AND WRITE ILLI IT AS A N EXPR
0005285	RATIO	
0005285001	FIND THE MISSING TERM IN A PROPORTION SUCH AS 2/5 = X/9	BY USING PROPO
0005285002	USE MEMBERS OF SETS OF EQUIVALENT RATIOS WITH THE SAME RATIOS.	FIRST TER ALEN
0005285003	USE THE IDEAS OF RATIO AND EQUIVALENT RATIO WITH	PROBLEMS QUIV
0005295	SETS	
0005295001	RECOGNIZE ALL THE SUBSETS OF A SET.	A SE
0005295002	IDENTIFY AND TELL THE DIFFERENCE BETWEEN EQUAL SETS AND	EQUIVALEN RENCE
0005295003	DESCRIBE THE SET WHICH IS THE UNION OF TWO SETS.	HE UN
0005295004	DESCRIBE THE SET WHICH IS THE INTERSECTION OF TWO SETS.	HE IN
0005295005	GIVEN A DESCRIPTION OF SET, INCLUDING EMPTY SET, WRITE	ITS ELEME INCL
0005295006	GIVEN A SET AND AN OPERATION, THE STUDENT WILL IDENTIFY	THE SET A , THE

LIONS IN EXPANDED FORM AND	GIVEN A NUMBER IN EXPANDED FORM, WRITE THE NUMERAL.
ILLIONS, EXPRESS IT ORALLY EXPRESS IT ORALLY AND WRITE	AND WRITE IT IN WORD FORM, AND GIVEN THE WORD FORM OF A IT AS A NUMERAL.
ROPORTION SUCH AS 2/5 = X/9	BY USING THE CROSS MULTIPLICATION PROPERTY.
ALENT RATIOS WITH THE SAME	FIRST TERM OR THE SAME SECOND TERM TO COMPARE DIFFERENT
QUIVALENT RATIO WITH	PROBLEMS THAT INCLUDE FRACTIONS AS TERMS.
A SET.	
RENCE BETWEEN EQUAL SETS AND	EQUIVALENT SETS.
F UNION OF TWO SETS.	
E INTERSECTION OF TWO SETS.	
INCLUDING EMPTY SET, WRITE	ITS ELEMENTS USING SET NOTATION.
, THE STUDENT WILL IDENTIFY	THE SET AS BEING CLOSED OR OPEN UNDER THAT OPERATION.

0005315	SUBTRACTION	
0005315001	DEMONSTRATE A WORKING KNOWLEDGE OF THE BASIC SUBTRACTION	FACTS, OPERAT
0005315002	STUDENT REGROUPS TO SOLVE MULTI-DIGIT SUBTRACTION	PROBLEMS.
0005315003	FIND THE DIFFERENCE BETWEEN 2 NUMBERS, NEITHER OF WHICH	HAS MORE THAN
0005315004	WRITE AN EQUATION FOR A WORD PROBLEM INVOLVING	SUBTRACTION,
0005315005	SOLVES ANY GIVEN SUBTRACTION EQUATION INVOLVING WHOLE	NUMBERS USING
0005325	VALUE OF COINS	
0005325001	MULTIPLIES MONEY VALUES USING DOLLARS AND DECIMAL	NOTATION.
0005325002	DIVIDES MONEY VALUES USING DOLLAR AND DECIMAL NOTATION.	

OF THE BASIC SUBTRACTION FACTS, OPERATIONS AND FUNCTIONS.

DIGIT SUBTRACTION PROBLEMS.

MBERS, NEITHER OF WHICH HAS MORE THAN 4 DIGITS.

BLEM INVOLVING SUBTRACTION, AND FIND THE ANSWER.

ATION INVOLVING WHOLE NUMBERS USING THE SUBTRACTION ALGORITHM.

LLARS AND DECIMAL NOTA[illegible].

R AND DECIMAL NOTATION.

0006005	ADDITION	
0006005001	FIND THE MISSING ADDEND IN AN INCOMPLETE ADDITION	SENTENCE
0006005002	ADD NUMBERS WITH 3 OR MORE DIGITS.	
0006015	BASES	
0006015001	COUNT IN BASE 2, 3, 4, 5, 6, 7, 8, 9.	
0006015002	GIVEN A BASE TEN NUMBER, EXPRESS IT AS A NUMBER IN A	BASE LESS
0006015003	GIVEN A NUMBER IN A BASE LESS THAN 10, EXPRESS IT AS A	BASE TEN
0006025	DECIMALS	
0006025001	WRITE SENTENCES USING DECIMAL NUMERALS TO REPRESENT	PHYSICAL
0006025002	STUDENT READS RATIONALS IN DECIMAL FORM.	
0006025003	WRITES RATIONALS IN DECIMAL FORM.	
0006025004	DEMONSTRATE AN UNDERSTANDING OF THE RELATIONSHIP	BETWEEN D
0006025005	EXPRESS A GIVEN DECIMAL TO THE NEAREST WHOLE NUMBER	10, 100,
0006025006	STUDENT SOLVES ADDITION PROBLEMS WITH RATIONALS IN	DECIMAL F
0006025007	ADD DECIMALS THROUGH 100,000.	

AN INCOMPLETE ADDITION SENTENCE.

DIGITS.

, 7, 8, 9.

PRESS IT AS A NUMBER IN A BASE LESS THAN TEN.

SS THAN 10, EXPRESS IT AS A BASE TEN NUMBER.

AL NUMERALS TO REPRESENT PHYSICAL SITUATIONS.

DECIMAL FORM.

FORM.

G OF THE RELATIONSHIP BETWEEN DECIMALS AND COMMON FRACTIONS.

THE NEAREST WHOLE NUMBER 10, 100, OR 1000.

BLEMS WITH RATIONALS IN DECIMAL FORM.

0.

0006025008	STUDENT SOLVES SUBTRACTION PROBLEMS WITH RATIONALS IN	DECIMAL FORM.
0006025009	SUBTRACT DECIMALS THROUGH 100,000.	
0006025010	EXPRESS FRACTIONS WHOSE DENOMINATORS ARE NOT FACTORS	OF 100 AS DEC
0006025011	GIVEN ANY DECIMALS THROUGH 100,000, EXPRESS THEM AS	FRACTIONS.
0006025012	WRITE ANY GIVEN DECIMAL THROUGH 100,000 IN WORD FORM	AND IN NUMERIC
0006025013	.VE MULTIPLICATION PROBLEMS WITH RATIONALS IN	DECIMAL FORM.
0006025014	SOLVES DIVISION PROBLEMS WITH RATIONALS IN DECIMAL	FORM.
0006025015	GIVEN FRACTIONS WITH DENOMINATORS EXPRESSIBLE AS	POWERS OF 10
0006025016	RECOGNIZE REPEATING DECIMALS.	
0006030	DIVISION	
0006030001	USE THE CONVENTIONAL DIVISION ALGORITHM.	
0006030002	FIND THE QUOTIENT FOR A DIVISION PROBLEM WITH A 2,3	DIGIT DIVISOR
0006030003	EXPRESS REMAINDER IN DIVISION PROBLEM AS A COMMON	FRACTION IN S
0006030004	GIVEN A DIVISION WORD PROBLEM WITH WHOLE NUMBERS,	WRITE EQUATION

LEMS WITH RATIONALS IN DECIMAL FORM.

00.

ATORS ARE NOT FACTORS OF 100 AS DECIMALS AND PERCENTS.

000, EXPRESS THEM AS FRACTIONS.

100,000 IN WORD FORM AND IN NUMERICAL FORM.

ITH RATIONALS IN DECIMAL FORM.

ATIONALS IN DECIMAL FORM.

RS EXPRESSIBLE AS POWERS OF 10 TO 100,000, EXPRESS THEM AS DECIMALS.

LGORITHM.

N PROBLEM WITH A 2,3 DIGIT DIVISOR.

ROBLEM AS A COMMON FRACTION IN SIMPLEST FORM.

IT LE NUMBERS, WRITE EQUATION FOR PROBLEM AND SOLVE EQUATION.

0006035	ESTIMATION	
0006035001	ESTIMATE AND COMPARE PERIMETERS OF POLYGONS, AS	RECTANGLES
0006040	EXPONENTIAL NOTATION	
0006040001	WRITE A NUMERAL IN EXPANDED FORM AS THE INDICATED SUM O THE NUMERAL FOR A NUMBER GIVEN IN XPANDED FORM.	PRODUCTS
0006040002	EXPRESS NUMBERS IN EXPANDED FORM BY USING EXPONENTIAL	NOTATION
0006040003	USE EXPONENTIAL NOTATION TO REPRESENT NUMBERS.	
0006040004	WRITE NUMBERS IN EXPANDED FORM WITH EXPONENTIAL	NOTATION.
0006040005	GIVEN A NUMBER IN EXPONENTIAL FORM, DESCRIBE THE BASE THE PRODUCT.	AND EXPONE
0006045	FRACTIONS	
0006045001	ADD UNLIKE FRACTIONS AND EXPRESS SUM IN LOWEST TERMS.	
0006045002	ADD 2 OR 3 LIKE FRACTIONS AND EXPRESS SUM IN	LOWEST TER
0006045003	SOLVES ADDITION PROBLEMS WITH UNLIKE FRACTIONS AND MIXED NUMBERS.	
0006045004	EXPRESS GIVEN FRACTIONS IN LOWEST TERMS.	
0006045005	SUBTRACT A FRACTION FROM A FRACTION WITH REGROUPING IS	NOT NECESS
0006045006	SUBTRACT UNLIKE FRACTIONS AND EXPRESS THE DIFFERENCE IN	LOWEST TER

ETERS OF POLYGONS, AS RECTANGLES, TRIANGLES, PARALLELOGRAMS.

FORM AS THE INDICATED SUM O PRODUCTS OF EACH DIGIT AND A MULTIPLE OF TEN. WRITE
VEN IN EXPANDED FORM.

FORM BY USING EXPONENTIAL NOTATION

REPRESENT NUMBERS.

ORM WITH EXPONENTIAL NOTATION.

AL FORM, DESCRIBE THE BASE AND EXPONENT, WRITE AS PRODUCT OF LIKE FACTORS. FIND

PRESS SUM IN LOWEST TERMS.

ND EXPRESS SUM IN LOWEST TERMS.

TH UNLIKE FRACTIONS AND MIXED NUMBERS.

LOWEST TERMS.

FRACTION WHEN REGROUPING IS NOT NECESSARY AND WRITE THE DIFFERENCE IN LOWEST TERMS.

ND EXPRESS THE DIFFERENCE IN LOWEST TERMS.

0006045007	STUDENT SOLVES SUBTRACTION PROBLEMS WITH UNLIKE FRACTIONS AND
0006045008	MULTIPLY FRACTIONS OR MIXED FRACTIONS BY A WHOLE NUMBER AND EXPRESS TH
0006045009	MULTIPLY A FRACTION BY A FRACTION, A FRACTION BY A MIXED NUMBER, OR A M EXPRESS THE ANSWER IN LOWEST TERMS.
0006045010	SOLVE MULTIPLICATION PROBLEMS IN FRACTIONAL FORM.
0006045011	SOLVE DIVISION PROBLEMS IN FRACTIONAL FORM.
0006045012	DIVIDE A WHOLE NUMBER BY A FRACTION OR A MIXED NUMBER, AND DIVIDE A F NUMBER.
0006045013	DIVIDE A FRACTION BY A FRACTION OR A MIXED FRACTION, AND DIVIDE A MIXED
0006060	GEOMETRY (PLANE FIGURES) - CIRCLE -
0006060001	FIND THE AREA OF A CIRCLE USING THE CORRECT FORMULA.
0006060002	RECOGNIZE THE RELATIONSHIP BETWEEN THE CIRCUMFERENCE AND THE DIAMET
0006060003	FIND THE CIRCUMFERENCE OF A CIRCLE USING THE CORRECT FORMULA.
0006065	GEOMETRY (PLANE FIGURES) - CONGRUENCE -
0006065001	USING A COMPASS AND/OR STRAIGHTEDGE, FIND WHETHER TWO LINE SEGMENTS CONGRUENT, AND WHETHER TWO TRIANGLES ARE CONGRUENT.

EMS WITH UNLIKE FRACTIONS AND MIXED NUMERALS.

TIONS BY A WHOLE NUMBER AND EXPRESS THE ANSWER IN LOWEST TERMS.

N, A FRACTION BY A MIXED NUMBER, OR A MIXED FRACTION BY A MIXED NUMBER, AND MS.

FRACTIONAL FORM.

IONAL FORM.

ION OR A MIXED NUMBER, AND DIVIDE A FRACTION OR A MIXED FRACTION BY A WHOLE

OR A MIXED FRACTION, AND DIVIDE A MIXED FRACTION BY A MIXED FRACTION.

E -

THE CORRECT FORMULA.

EN THE CIRCUMFERENCE AND THE DIAMETER OF A CIRCLE.

LE USING THE CORRECT FORMULA.

UENCE -

DGE, FIND WHETHER TWO LINE SEGMENTS ARE CONGRUENT, WHETHER TWO ANGLES ARE GLES ARE CONGRUENT.

0006070	GEOMETRY (PLANE FIGURES) - CONSTRUCTIONS -	
0006070001	USING A PROTRACTOR AND A STRAIGHTEDGE, CONSTRUCT AND 2 DEGREES.	MEASURE AN
0006070002	USING A COMPASS, CONSTRUCT THE BISECTOR OF A GIVEN	ANGLE.
0006070003	GIVEN THE DIAMETER OR RADIUS OF A CIRCLE, USE A COMPASS	TO CONSTRU
0006080	GEOMETRY (PLANE FIGURES) - LINES -	
0006080001	IDENTIFIES PARALLEL, INTERSECTING, AND PERPENDICULAR	LINES.
0006080002	CONSTRUCT PARALLEL LINES.	
0006080003	CONSTRUCT A LINE PERPENDICULAR TO A GIVEN LINE.	
0006110	GEOMETRY (PLANE FIGURES) - SYMBOLS AND NOTATION -	
0006110001	GIVEN AN ILLUSTRATION OF A GEOMETRIC FIGURE, DESCRIBE IT USING THE	
0006120	GEOMETRY (PLANE FIGURES) - TERMINOLOGY -	
0006120001	DEMONSTRATE KNOWLEDGE OF BASIC TERMS RELATED TO	GEOMETRY.
0006125	GEOMETRY (PLANE FIGURES) - TRIANGLE -	
0006125001	SOLVE PROBLEMS INVOLVING THE MEASUREMENT OF INACCESSIBLE HEIGHTS AN SIMILAR TRIANGLES.	

AIGHTEDGE, CONSTRUCT AND MEASURE ANGLES; THE MEASURE SHOULD BE CORRECT TO WITHI

HE BISECTOR OF A GIVEN ANGLE.

OF A CIRCLE, USE A COMPASS TO CONSTRUCT THE CIRCLE.

INES -

CTING, AND PERPENDICULAR LINES.

AR TO A GIVEN LINE.

YMBOLS AND NOTATION -

EOMETRIC FIGURE, DESCRIBE IT USING THE CORRECT SYMBOL.

ERMINOLOGY -

IC TERMS RELATED TO GEOMETRY.

RIANGLE -

MEASUREMENT OF INACCESSIBLE HEIGHTS AND DISTANCES INDIRECTLY USING THE PROPERTIES O

0006125002 RECOGNIZE THE PROPERTIES OF ISOSCELES TRIANGLES, SCALENE TRIANG
THE FACT THAT THE LONGEST SIDE OF A TRIANGLE IS OPPOSITE THE ANGLE OF G

0006125003 FIND VOLUME OF A TRIANGLE USING U = 1/2 BH.

0006130 GEOMETRY (SIZE AND SHAPE)

0006130001 ESTIMATE THE AREA OF AN IRREGULAR PLANE REGION BY USE OF A GRID WHERE A
OF THE INNER AND OUTER AREAS.

0006135 GEOMETRY (SOLIDS)

0006135001 GIVEN CLOSED SURFACES, IDENTIFIES A RIGHT PRISM.

0006135002 GIVEN CLOSED SURFACES, IDENTIFIES PYRAMIDS, CYLINDERS, AND CONES.

0006135003 MAKE MODELS OF VARIOUS PRISMS AND FIND THEIR SURFACE AREAS.

0006135004 FIND THE VOLUME OF A RECTANGULAR PRISM.

0006135005 CONSTRUCT THE SEVEN SOMA PIECES WHEN GIVEN PICTURES OF THEM.

0006135006 CONSTRUCT MODELS OF SPACE FIGURES (SPHERE, CYLINDER, CONE, PRISM, A

0006135007 GIVEN STRUCTURE OR PICTURE OF A STRUCTURE OF SOMA PIECES, CONSTR

0006140 GEOMETRY (SPACE RELATIONSHIPS)

SOSCELES TRIANGLES, SCALENE TRIANGLES, AND EQUILATERAL TRIANGLES, SUCH AS
E OF A TRIANGLE IS OPPOSITE THE ANGLE OF GREATEST MEASURE.

NG U = 1/2 BH.

ULAR PLANE REGION BY USE OF A GRID WHERE AN APPROXIMATION TO THE AREA IS THE AVERAGE

IES A RIGHT PRISM;

IES PYRAMIDS, CYLINDERS, AND CONES.

AND FIND THEIR SURFACE AREAS;

AR PRISM.

S WHEN GIVEN PICTURES OF THEM.

RES (SPHERE, CYLINDER, CONE, PRISM, AND PYRAMID).

A STRUCTURE OF SOMA PIECES, CONSTRUCT A DUPLICATE.

0006140001 IDENTIFIES SETS OF POINTS INSIDE, ON, OR OUTSIDE A CLOSED SURF

0006140002 RECOGNIZE THAT A LINE AND A PLANE ARE BOTH SUBSETS OF SPACE.

0006140003 RECOGNIZE THAT A LINE (ONE DIMENSIONAL SPACE) IS A SUBSET OF A

0006140004 RECOGNIZE THE REFLECTION OF A PLANE FIGURE IN A MIRROR AND DRAW DI

0006145 GRAPHS

0006145001 CONSTRUCT A PICTURE GRAPH USING DATA PRESENTED IN A DIFFERENT F

0006145002 CONSTRUCT A LINE GRAPH USING DATA PRESENTED IN A DIFFERENT

0006145003 CONSTRUCT A BAR GRAPH USING DATA PRESENTED IN A DIFFERENT B

0006145004 CONSTRUCT A CIRCLE GRAPH USING DATA PRESENTED IN A DIFFERENT C

0006145005 COLLECTS DATA.

0006145006 REPRESENTS DATA IN TABLES AND GRAPHS.

0006145007 INTERPRETS DATA.

0006180 MEASUREMENT (LINEAR)

0006180001 MEASURES LENGTHS OF OBJECTS IN EIGHT AND SIXTEENTH INCHES.

NSIDE, ON, OR OUTSIDE A	CLOSED SURFACE.
PLANE ARE BOTH SUBSETS OF	SPACE.
DIMENSIONAL SPACE) IS A	SUBSET OF A PLANE (TWO-DIMENSIONAL SPACE).
A PLANE FIGURE IN A MIRROR	AND DRAW DIAGRAMS.
SING DATA PRESENTED IN A	DIFFERENT PICTURE GRAPH.
G DATA PRESENTED IN A	DIFFERENT LINE GRAPH.
DATA PRESENTED IN A	DIFFERENT BAR GRAPH.
ING DATA PRESENTED IN A	DIFFERENT CIRCLE GRAPH.

ND GRAPHS.

HT AND SIXTEENTH	INCHES.

0006180002 USE THE METRIC SYSTEM OF MEASURE FOR LENGTH.

0006180003 USING ENGLISH UNITS, MAKE LINEAR MEASUREMENTS TO A GIVEN LEVEL OF SIMPLEST TERMS.

0006185 MEASUREMENT (LIQUID)

0006185001 USING ENGLISH UNITS, MAKE LIQUID MEASUREMENTS TO A GIVEN LEVEL OF SIMPLEST TERMS.

0006190 MEASUREMENT (PRECISION)

0006190001 EXPLAIN WHY MEASUREMENTS ARE NOT COMPLETELY ACCURATE AND WHAT IS MEANT

0006190002 WORK WITH APPROXIMATE NUMBERS. FOR EXAMPLE, KNOW THAT THE AREA OF A INCHES TO THE NEAREST HUNDREDTH OF AN INCH AS AN AREA BETWEEN 6.4 X

0006205 MEASUREMENT (TEMPERATURE)

0006205001 RECORD TO THE NEAREST DEGREE TEMPERATURE READINGS ON THE FAHRENHEIT SCA

0006210 MEASUREMENT (TIME)

0006210001 EXPRESS TIME GIVEN ON 24 HOUR BASIS, ON A 12 HOUR BASIS AND VICE VERSA

0006220 MULTIPLICATION

0006220001 FIND THE PRODUCT OF 2 NUMBERS, EACH NUMBER HAVING 2 OR MORE DIGITS.

E FOR LENGTH.

. OF R MEASUREMENTS TO A GIVEN LEVEL OF ACCURACY AND RECORD YOUR MEASURES IN

. OF D MEASUREMENTS TO A GIVEN LEVEL OF ACCURACY AND RECOPD YOUR MEASURES IN

ANT E COMPLETELY ACCURATE AND WHAT IS MEANT BY STANDARD UNITS OF MEASURE.

A F FOR EXAMPLE, KNOW WHAT THE AREA OF A RECTANGLE WHOSE SIDES MEASURE 6.5 AND 3.6
X 3 OF AN INCH AS AN AREA BETWEEN 6.4 X 3.5 AND 6.6 X 3.7 SQUARE INCHES.

SCAL PERATURE READINGS ON THE FAHRENHEIT SCALE.

ERSA SIS, ON A 12 HOUR BASIS AND VICE VERSA.

CH NUMBER HAVING 2 OR MORE DIGITS.

0006220002 GIVEN A WORD PROBLEM INVOLVING MULTIPLICATION OF WHOLE NUMBERS, W I
EQUATION.

0006230 NUMBER SYSTEMS (EARLY)

0006230001 AFTER EXAMINING NUMBER SYSTEMS OTHER THAN OUR OWN, THE STUDENT W E
NUMBER SYSTEM.

0006235 NUMBERS (INTEGERS)

0006235001 RECOGNIZE THE USE OF THE NUMBER LINE IN THE EXPLANATION OF INTEGER M

0006235002 GIVEN AN INTEGER, RECOGNIZE WHETHER IT IS LESS THAN, EQUAL TO,

0006235003 RECOGNIZE THAT THE INTEGERS (POSITIVE AND NEGATIVE WHOLE NUMBERS A

0006235004 DETERMINE GREATER THAN, LESS THAN, AND BETWEENNESS FOR (POSITIVE S

0006235005 FIND THE ADDITIVE INVERSE (OPPOSITE) AND EACH INTEGER BY USING THE O

0006235006 RECOGNIZE INTEGERS AS NEGATIVE NUMBERS. I

0006235007 ADD INTEGERS.

0006235008 USE THE COMMUTATIVE PROPERTY OF ADDITION FOR INTEGERS. Y

0006235009 FIND THE DIFFERENCE BETWEEN TWO INTEGERS.

0006235010 SOLVE WORD PROBLEMS REQUIRING THE ADDITION OF TWO INTEGERS. N

S, ING MULTIPLICATION OF WHOLE NUMBERS, WRITE AN EQUATION FOR THE PROBLEM AND SOLVE THE

T W EMS OTHER THAN OUR OWN, THE STUDENT WILL LIST A MINIMUM OF TWO ADVANTAGES OF OUR

EGER MBER LINE IN THE EXPLANATION OF INTEGERS.

TO, WHETHER IT IS LESS THAN, EQUAL TO, OR GREATER THAN ANOTHER GIVEN INTEGER.

S A (POSITIVE AND NEGATIVE WHOLE NUMBERS AND ZERO) ARE AN EXTENSION OF THE WHOLE NUMBERS.

IVE S THAN, AND BETWEENNESS FOR (POSITIVE, NEGATIVE, AND ZERO) INTEGERS.

THE OPPOSITE) AND EACH INTEGER BY USING THE NUMBER LINE.

IVE NUMBERS.

Y OF ADDITION FOR INTEGERS.

TWO INTEGERS.

RS G THE ADDITION OF TWO INTEGERS.

0006235011	GRAPH ORDERED PAIRS OF INTEGERS ON A COORDINATE SYSTEM.
0006235012	RECOGNIZE THAT THERE IS NO SMALLEST OR LARGEST RATIONAL NUMBER BETWEE
0006245	NUMBERS (RATIONAL AND IRRATIONAL)
0006245001	IDENTIFY RATIONAL NUMBERS FROM SETS OF EQUIVALENT FRACTIONS.
0006245002	COMPLETE EQUATIONS DEALING WITH EQUALITY AND INEQUALITY OF RATIONAL N
0006245003	DEFINE VOCABULARY OF TERMS USED IN CONNECTION WITH THE STUDY OF FRAC
0006245004	USE NEGATIVE NUMBERS IN MANY DIFFERENT SITUATIONS.
0006245005	RECOGNIZE THAT 1/1 OR 1 IS AN IDENTITY ELEMENT FOR MULTIPLICATIO
0006245006	MULTIPLY RATIONAL NUMBERS.
0006245007	USE THE COMMUTATIVE PROPERTIES OF MULTIPLICATION FOR RATIONAL NUMB
0006245008	USE THE ASSOCIATIVE PROPERTY OF MULTIPLICATION FOR RATIONAL NUMB
0006245009	USE THE DISTRIBUTIVE PROPERTY OF MULTIPLICATION WITH RESPECT TO AD
0006245010	RECOGNIZE THE MULTIPLICATIVE INVERSE (RECIPROCAL) FOR EVERY POSITIV THE DIVISION OF RATIONAL NUMBERS.
0006245011	RELATE CONCEPTS OF DECIMALS TO RATIONAL NUMBERS AND LONG DIVISION.

ON A COORDINATE SYSTEM.

TWEE LEST OR LARGEST RATIONAL NUMBER BETWEEN TWO POSITIVE INTEGERS.

L)

SETS OF EQUIVALENT FRACTIONS.

AL N EQUALITY AND INEQUALITY OF RATIONAL NUMBERS.

RAC IN CONNECTION WITH THE STUDY OF FRACTIONS AND RATIONAL NUMBERS.

FFERENT SITUATIONS.

ATIO DENTITY ELEMENT FOR MULTIPLICATION IN THE SET OF RATIONAL NUMBERS.

NUMB OF MULTIPLICATION FOR RATIONAL NUMBERS.

NUMB MULTIPLICATION FOR RATIONAL NUMBERS.

AD F MULTIPLICATION WITH RESPECT TO ADDITION OF RATIONAL NUMBERS.

TIV VERSE (RECIPROCAL) FOR EVERY POSITIVE RATIONAL NUMBER EXCEPT ZERO AND USE IT IN
S.

TIONAL NUMBERS AND LONG DIVISION.

0006245012	RECOGNIZE THAT THE OPERATION OF DIVISION IS THE INVERSE OF MULTIP NUMBERS.
0006245013	DIVIDE RATIONAL NUMBERS.
0006245014	RECOGNIZE THAT THE RATIONAL NUMBERS (POSITIVE AND NEGATIVE AND ZERO) ARE AN EXTENSION OF THE INTEGERS.
0006245015	RECOGNIZE THAT THE RATIONAL NUMBER SYSTEM IS DENSE; THAT IS, THERE IS A RATIONAL NUMBER.
0006250	NUMBERS (WHOLE)
0006250001	USE THE DISTRIBUTIVE LAW FOR MULTIPLICATION OVER ADDITION
0006250002	DEMONSTRATE WHETHER OR NOT THE OPERATIONS OF ADDITION AND SUBTR
0006250003	DEMONSTRATE WHETHER OR NOT THE OPERATIONS OF DIVISION ASSOCIATIVE.
0006250004	DEMONSTRATE WHETHER OR NOT THE OPERATIONS OF DIVISION ASSOCIATIVE.
0006250005	USE THE DISTRIBUTIVE LAW FOR DIVISION OVER ADDITION AND SUBTRACTI
0006250006	DEMONSTRATE WHETHER OR NOT THE OPERATIONS OF DIVISION
0006265	PERCENTAGE
0006265001	INTERPRET PERCENT AS A RATIO IN WHICH THE SECOND NUMBER IS ALWAYS
0006265002	RELATE PERCENT NOTATION TO FRACTIONS AND DECIMALS.

LTIP N OF DIVISION IS THE INVERSE OF MULTIPLICATION IN THE SET OF POSITIVE RATIONAL

IVE NUMBERS (POSITIVE AND NEGATIVE WHOLE NUMBERS, POSITIVE AND NEGATIVE FRACTIONS.
OF THE INTEGERS.

IS, NUMBER SYSTEM IS DENSE; THAT IS, BETWEEN EACH TWO DIFFERENT RATIONAL NUMBERS,

ION R MULTIPLICATION OVER ADDITION AND SUBTRACTION.

UBTR THE OPERATIONS OF ADDITION AND SUBTRACTION ARE COMMUTATIVE AND ASSOCIATIVE.

ION THE OPERATIONS OF DIVISION AND MULTIPLICATION ARE COMMUTATIVE AND

IDN THE OPERATIONS OF DIVISION AND MULTIPLICATION ARE COMMUTATIVE AND

ACTI R DIVISION OVER ADDITION AND SUBTRACTION USING ONE PLACE DIVISORS.

ION THE OPERATIONS OF DIVISION AND MULTIPLICATION HAVE AN IDENTITY ELEMENT.

WAYS O IN WHICH THE SECOND NUMBER IS ALWAYS 100.

RACTIONS AND DECIMALS.

0006265003 SOLVE PROBLEMS INVOLVING PERCENTAGE DISCOUNT.

0006265004 SOLVE ALL THREE CASES OF PERCENTAGE PROBLEMS AS PROBLEMS IN WHICH THEY RATIOS.

0006270 PLACE VALUE

0006270001 EXPRESS ORALLY AND WRITE NUMERALS FOR NUMBERS TO BILLIONS.

0006270002 DESCRIBE THE PLACE VALUE OF EACH DIGIT OF A NUMBER TO BILLIONS AND G

0006275 PROBABILITY

0006275001 CARRIES OUT SIMPLE EXPERIMENTS IN PROBABILITY.

0006275002 RECORDS SIMPLE EXPERIMENTS IN PROBABILITY.

0006275003 INTERPRETS RESULTS FROM SIMPLE EXPERIMENTS IN PROBABILITY.

0006280 PROPORTION

0006280001 USE PROPORTIONS IN PROBLEMS ABOUT THE LENGTH OF SIDES IN SIMILAR TRIANG

0006285 RATIO

0006285001 USE EQUIVALENT RATIOS TO CONVERT FRACTIONS TO DECIMALS AND CONVERSELY

NTAGE DISCOUNT.

HEY NTAGE PROBLEMS AS PROBLEMS IN WHICH THEY FIND THE MISSING TERM OF TWO EQUIVALENT

ALS FOR NUMBERS TO BILLIONS.

ND G CH DIGIT OF A NUMBER TO BILLIONS AND GIVE THE DIGITS VALUE IN EXPANDED FORM.

IN PROBABILITY.

PROBABILITY.

Y. EXPERIMENTS IN PROBABILITY.

IANG OUT THE LENGTH OF SIDES IN SIMILAR TRIANGLES.

GE FRACTIONS TO DECIMALS AND CONVERSELY.

0006285002	SOLVE RATIO PROBLEMS WHERE SOME OR ALL OF THE TERMS OF THE RATIO
0006285003	RELATE RATIOS TO GEOMETRY.
0006290	SCIENTIFIC NOTATION
0006290001	EXPRESS LARGE NUMBERS BY USING SCIENTIFIC NOTATION.
0006310	STATISTICS
0006310001	DETERMINES AVERAGE BY PERFORMING THE APPROPRIATE PROBLEM SITUATION
0006315	SUBTRACTION
0006315001	SUBTRACT NUMBERS WITH 3 OR MORE DIGITS.
0006315002	GIVEN A WORD PROBLEM INVOLVING ADDITION AND/OR SUBTRACTI PROBLEM AND SOLVE THE EQUATION.

SOME OR ALL OF THE TERMS OF THE RATIOS ARE WRITTEN AS DECIMALS.

SING SCIENTIFIC NOTATION.

ORMING THE APPROPRIATE PROBLEM SITUATIONS.

MORE DIGITS.

VING ADDITION AND/OR SUBTRACTION OF WHOLE NUMBERS, WRITE AN EQUATION FOR THE
TION.